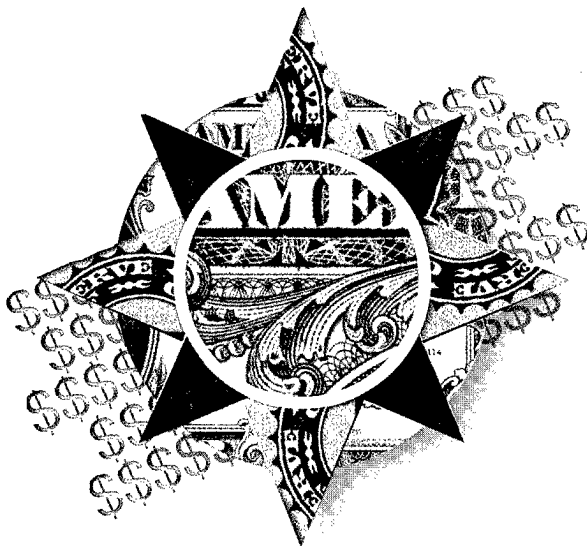


The Economic and Budget Outlook: Fiscal Years 1998 - 2007



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A REPORT TO THE SENATE AND
HOUSE COMMITTEES ON THE BUDGET



JANUARY 1997

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**THE ECONOMIC AND BUDGET OUTLOOK:
FISCAL YEARS 1998-2007**

The Congress of the United States
Congressional Budget Office

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NOTES

Unless otherwise indicated, all years referred to in Chapters 1 and 3 are calendar years and all years in Chapters 2 and 4 are fiscal years.

Some figures in this report indicate periods of recession by using shaded vertical bars. The bars extend from the peak to the trough of the recession.

Unless otherwise indicated, CBO baseline projections assume that discretionary spending is adjusted for inflation. In the projections, spending from the Violent Crime Reduction Trust Fund (VCRTF) in 1998 through 2007 is equal to the level appropriated for 1997, adjusted for inflation. Because general-purpose discretionary spending (all discretionary spending other than that from the VCRTF) at the 1997 level adjusted for inflation would exceed the statutory cap on such spending in 1998, projected general-purpose spending is set equal to the cap in 1998 and is assumed to increase at the rate of inflation from the 1998 cap level in 1999 through 2007.

Unemployment rates throughout the report are calculated on the basis of the civilian labor force.

Numbers in the text and tables of this report may not add to totals because of rounding.

National income and product account (NIPA) data shown in the tables do not incorporate the revised data for the third quarter of 1996 that were released on December 20, 1996.

Preface

This volume is one of a series of reports on the state of the economy and the budget that the Congressional Budget Office (CBO) issues each year. It satisfies the requirement of section 202(f) of the Congressional Budget Act of 1974 for CBO to submit periodic reports to the Committees on the Budget on fiscal policy and to provide five-year baseline projections of the federal budget. In keeping with CBO's mandate to provide objective and impartial analysis, the report contains no recommendations.

The analysis of the economic outlook presented in Chapter 1 was prepared by the Macroeconomic Analysis Division under the direction of Robert Dennis and John F. Peterson. Matthew Salomon wrote the chapter. John Peterson carried out the economic forecast and projections. Robert Arnold, Laurie Brown, Sandra Cannon, Edward Gamber, Douglas Hamilton, Juann Hung, Kim Kowalewski, Angelo Mascaro, Benjamin Page, Frank Russek, Matthew Salomon, Kent Smetters, John Sturrock, and Christopher Williams provided comments and background analysis. Ken Fears, Timothy Lasocki, and Michael Wolosin provided research assistance.

The baseline outlay projections were prepared by the staff of the Budget Analysis Division under the supervision Paul N. Van de Water, Robert Sunshine, Paul Cullinan, Peter Fontaine, James Horney, Michael Miller, and Murray Ross. The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Rosemary D. Marcuss and Richard Kasten. Jeffrey Holland wrote Chapter 2. Edward Gamber and James Horney wrote Chapter 3. John Peterson and Daniel Kowalski wrote Chapter 4. Daniel Kowalski wrote Appendix A; Sandy Davis and James Horney wrote Appendix B; Jennifer Winkler wrote Appendixes C and I; Michael Simpson wrote Appendixes D, E, and F; Murray Ross wrote Appendix G; and Jeffrey Lemieux wrote Appendix H. James Horney wrote the summary of the report.

At a recent meeting, CBO's Panel of Economic Advisers discussed an early version of the economic forecast underlying this report. Members of that panel are Robert Barro, Michael Boskin, Barry P. Bosworth, Robert Dederick, Rudiger Dornbusch, Martin Feldstein, Robert J. Gordon, Lyle E. Gramley, Robert E. Hall, Marvin Kusters, Anne Krueger, N. Gregory Mankiw, Allan Meltzer, Rudolph Penner, James Poterba, Robert Reischauer, Sherwin Rosen, Joel Slemrod, John Taylor, and James Tobin. Lincoln Anderson and Edward McKelvey attended as guests. Despite the considerable assistance afforded by those outside advisers, they are not responsible for any errors in the analyses in this document.

Paul L. Houts supervised the editing of this report. Major portions were edited by Paul L. Houts, Sherwood D. Kohn, Sherry Snyder, and Christian Spoor. In addition to editing several appendixes, Marlies Dunson provided editorial assistance during the production of the report. The authors owe thanks to Marion Curry, Dorothy Kornegay, and Linda Lewis Harris, who assisted in the preparation of the report. Kathryn Quattrone and Jill Sands prepared the total report for final publication.

June E. O'Neill
Director

January 1997

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Summary

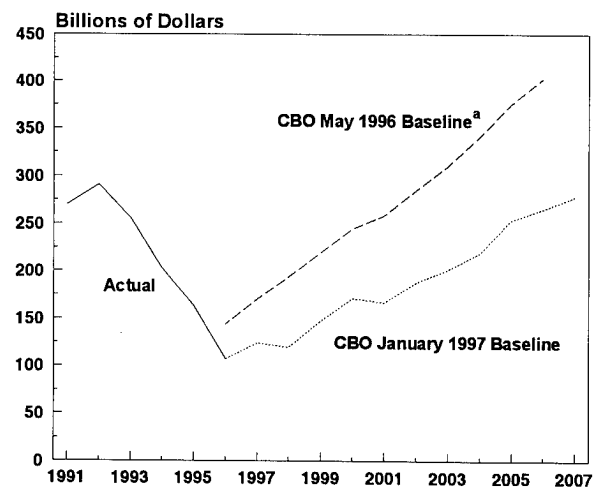
After four years of sharp decline, the federal budget deficit will rise modestly over the next 10 years if current laws and policies do not change, according to the latest projections of the Congressional Budget Office. CBO's overall economic outlook has changed little since its last forecast, published in May 1996. But its new projections of the deficit are significantly lower than last year's (see Summary Figure 1). Four major factors account for the improved budget outlook: revised estimates of the growth of spending for Medicare and Medicaid; the enactment of welfare reform legislation; higher projected revenues, particularly in the near term; and the lower debt-service costs that result from lower deficits and a lower level of publicly held federal debt.

In CBO's baseline projections—which assume that current laws governing federal taxes and entitlement programs are not changed—the budget deficit will grow from the \$107 billion posted in fiscal year 1996 to \$124 billion in 1997. It will reach \$278 billion 10 years later if discretionary spending keeps pace with inflation (subject to the statutory limit on such spending in 1998).

Relative to the size of the U.S. economy, the projected deficits are smaller than those of the past 20 years (see Summary Figure 2). But they are well above the average for the 1950s and 1960s. As a percentage of gross domestic product (GDP), the deficit under CBO's baseline assumptions will average 1.9 percent over the 1997-2007 period, compared with an average of 3.5 percent over the previous 20 years and 0.6 percent from 1950 through 1969.

The underlying trend in the deficit can be seen by removing the effects of fluctuations in the business cycle and transactions that do not represent real impacts on the economy. The resulting standardized-employment deficit shows a pattern of rising deficits from 1961 through the early 1980s, followed by a generally downward trend since then (see Summary Figure 3). Likewise, the course of federal debt held by the public as a percentage of GDP has also changed from its long-

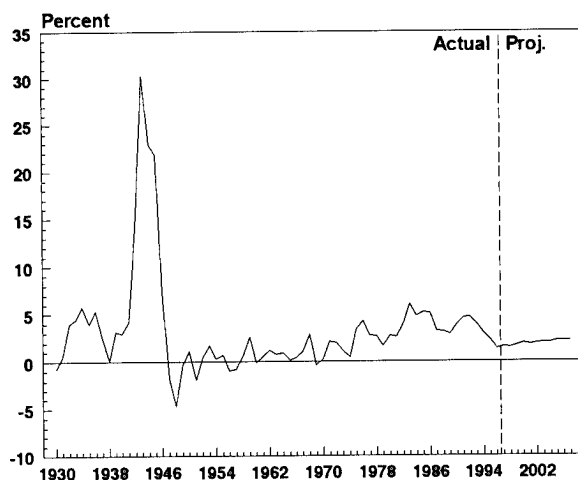
Summary Figure 1.
Actual and Projected Deficits (By fiscal year)



SOURCES: Congressional Budget Office and *Budget of the United States Government, Fiscal Year 1997: Historical Tables*.

a. From *The Economic and Budget Outlook: Fiscal Years 1997-2006*.

Summary Figure 2.
The Deficit as a Percentage of GDP
(By fiscal year)



SOURCES: Congressional Budget Office and *Budget of the United States Government, Fiscal Year 1997: Historical Tables*.

NOTE: Negative numbers indicate a budget surplus.

term trend. After peaking at more than 100 percent of GDP at the end of World War II, debt held by the public generally declined for the next 35 years (see Summary Figure 4). It started climbing in the early 1980s but leveled off in recent years at about 50 percent of GDP. CBO projects that it will remain just under that level through 2007.

Because CBO is now projecting baseline deficits that are roughly one-third lower than it anticipated last May, the differences between its new projections and the current-services estimates in the President's forthcoming budget for fiscal year 1998 will most likely be smaller than they were last year. If history is a guide, however, CBO's baseline deficits will probably still be generally higher than the Administration's. The reason is that CBO typically uses more cautious assumptions about the paths of the economy and federal spending and revenues.

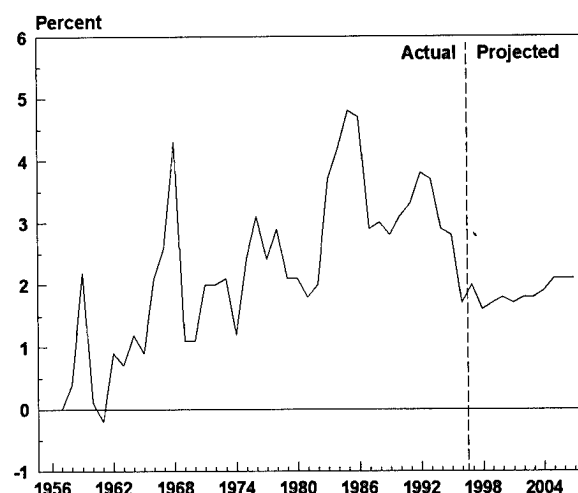
The performance of the economy could exceed CBO's baseline assumptions, but it is just as likely that deficits will be pushed up by an economy that is less robust than projected. One particular risk that could render CBO's baseline projections too optimistic is the possibility that the economy will experience a recession sometime in the next decade. CBO is not forecasting

any significant changes in economic trends through 1998. It does not attempt to predict cyclical changes after that, but its projections do reflect an average historical probability of boom or recession in any year during the projection period. Although no signs of a downturn in the economy are visible now, there is little reason to suppose that economic management has advanced to the point that recessions will never occur again. If a recession did occur, it would push the deficit for at least a few years well above the level dictated by the average chance of a boom or recession in those years.

In addition, a variety of noneconomic factors could push deficits substantially above CBO's current projections. For instance, if spending for Medicare and Medicaid grew at a rate nearer that of the past 10 years instead of the lower rate assumed in the baseline, the deficit would jump significantly. And although there is no reason to expect another deposit insurance crisis in the coming years, some other unexpected shock to the budget could occur at any time.

On another cautionary note, the smaller deficits that CBO now expects through 2007 should not be taken as a sign that long-term problems looming on the budgetary horizon have gone away. CBO has not yet

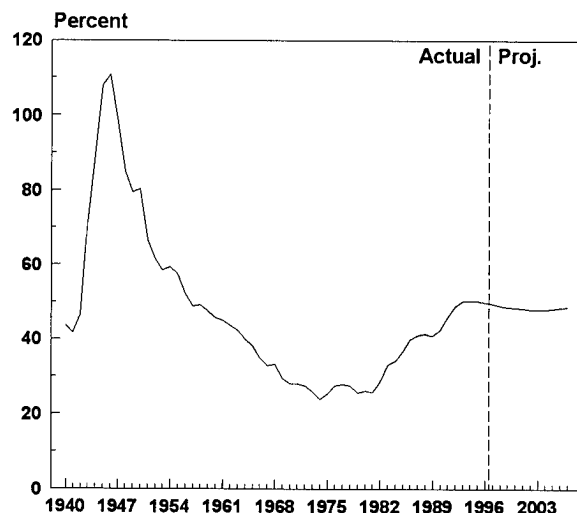
Summary Figure 3.
The Standardized-Employment Deficit as a
Percentage of Potential GDP (By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: Negative numbers indicate a budget surplus.

Summary Figure 4.
Debt Held by the Public as a Percentage
of GDP (By fiscal year)



SOURCE: Congressional Budget Office.

revised the long-term budget projections it published last May to reflect its new deficit projections. But the improved outlook through 2007 is likely to ameliorate only somewhat the budgetary pressures that will start a few years later with the retirement of the first baby boomers and the continued growth of per-person health care costs. Policymakers will still need to make tough decisions about paring entitlement benefits and other spending or increasing taxes to avoid unsustainable growth in the federal deficit and debt in the next 40 years or so.

Both the Congress and the President have pledged to balance the federal budget by 2002. Under current policies, CBO projects a deficit of \$188 billion for that year—\$97 billion lower than it estimated in May 1996. Eliminating the deficit by 2002 would boost the economy by lowering interest rates and increasing growth slightly. CBO estimates that those beneficial economic effects would contribute \$34 billion to deficit reduction in 2002 through lower federal interest payments and higher revenues. Thus, lawmakers would need to achieve only \$154 billion in savings from policy changes (including debt-service savings) in 2002 to balance the budget—compared with the \$210 billion that CBO estimated last May.

The Baseline Economic and Budget Outlook

CBO's baseline economic and budget projections reflect its assessment of the course of the economy and the budget in 1997 through 2007 if budgetary policies stay the same. Those projections do not reflect the possibility that the President and the Congress will agree on a plan that would substantially reduce the deficit. Just over a year ago, the Congress passed a bill, the Balanced Budget Act of 1995, that CBO estimated would have led to a balanced budget in 2002 (assuming future discretionary spending stayed within the amounts assumed by the Congress). The President vetoed that legislation, however, and proposed an alternative plan. Continuing disagreement about how to accomplish the common goal of balancing the budget by 2002 ultimately prevented enactment of the legislation needed to do so.

The Baseline Economic Outlook

CBO does not detect any imbalances that threaten economic stability, so its new forecast assumes no significant changes in the course of the economy in the short run. Its longer-term projections reflect an underlying trend of moderate growth and continuing low inflation. CBO does not attempt to predict cyclical changes in the economy more than two years ahead, but its projections after that reflect the average historical probability of a boom or recession in any year.

The Forecast for 1997 and 1998. CBO forecasts that under current policies the economy will largely continue along its current path for the next two years. The nation's gross domestic product adjusted for inflation (real GDP) will grow at an average annual rate of 2.2 percent in calendar years 1997 and 1998, the same as over the past two years. The average interest rate on three-month Treasury bills for the next two years is forecast to equal the 1996 rate of 5 percent (see Summary Table 1). And the average interest rate on 10-year Treasury notes in 1997 and 1998 is expected to remain near the current rate.

The unemployment rate, by contrast, is expected to rise from the current level of 5.3 percent to 5.7 percent by the end of 1998. That would bring it close to CBO's estimate of the nonaccelerating inflation rate of unemployment (NAIRU)—the level of unemployment that is consistent with a stable rate of inflation. Over the past year and a half, the unemployment rate has been lower than the NAIRU, causing some upward pressure on prices. But temporary factors, primarily the unusually

slow growth in prices of medical care and computers, held down inflation in 1996. CBO forecasts that as the effects of those factors wane, the annual growth rate of the GDP price index will increase slightly, from 2.1 percent in 1996 to 2.5 percent in 1998.

Although their effect on consumer prices is less pronounced, those same factors also explain an expected uptick in the next two years in the consumer

Summary Table 1.
Economic Projections for Calendar Years 1997 Through 2007

	Estimate 1996 ^a	Forecast		Projected								
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Nominal GDP (Billions of dollars)	7,570	7,916	8,277	8,678	9,097	9,532	9,984	10,453	10,938	11,443	11,969	12,518
Nominal GDP (Percentage change)	4.4	4.6	4.6	4.9	4.8	4.8	4.7	4.7	4.6	4.6	4.6	4.6
Real GDP (Percentage change)	2.3	2.3	2.0	2.2	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9
GDP Price Index (Percentage change)	2.1	2.3	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
CPI-U ^b (Percentage change)	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1
Unemployment Rate (Percent)	5.4	5.3	5.6	5.8	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.0	5.0	5.0	4.9	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Ten-Year Treasury Note Rate (Percent)	6.4	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Tax Bases (Billions of dollars)												
Corporate profits	646	661	681	692	707	727	751	780	814	850	888	932
Wage and salary disbursements	3,628	3,798	3,951	4,127	4,314	4,512	4,719	4,935	5,159	5,393	5,637	5,893
Other taxable income	1,613	1,691	1,777	1,881	1,986	2,086	2,185	2,285	2,388	2,495	2,606	2,721
Tax Bases (Percentage of GDP)												
Corporate profits	8.5	8.3	8.2	8.0	7.8	7.6	7.5	7.5	7.4	7.4	7.4	7.4
Wage and salary disbursements	47.9	48.0	47.7	47.6	47.4	47.3	47.3	47.2	47.2	47.1	47.1	47.1
Other taxable income	21.3	21.4	21.5	21.7	21.8	21.9	21.9	21.9	21.8	21.8	21.8	21.7

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Incorporates data for the first three quarters of 1996 published November 27, 1996.

b. CPI-U is the consumer price index for all urban consumers.

price index for all urban consumers (CPI-U), excluding food and energy prices. However, CBO expects that a slowing in the growth of food and energy prices during that period will keep the average growth in the CPI-U at the same 2.9 percent rate experienced in 1996.

Projections for 1999 Through 2007. CBO produces a detailed forecast for the next two years that takes into account the possible effects of the business cycle on the economy. For 1999 and later years, CBO projects economic variables based on longer-term trends in the fundamental factors that determine economic performance—such as growth in the labor force and productivity.

In its longer-term projections, CBO acknowledges that GDP has on average fallen slightly below potential GDP over a long period of time. By maintaining that historical relationship in its projections, CBO reflects the average historical probability of booms and recessions without attempting to predict when they will occur. CBO assumes that GDP will reach the average historical gap of 0.3 percent below potential GDP by the end of 1998 and will grow, on average, at the same rate as potential GDP after that. The growth rate for real GDP will decline from 2.2 percent a year to 1.9 percent over the 1999-2007 period (see Summary Table 1). That projected decline results primarily from a slowing in the growth of the capital stock, although a similar slowing of the growth in the labor force also contributes.

Growth in the GDP price index is expected to average 2.6 percent a year from 1999 through 2007. Growth in the CPI will remain close to 3 percent, increasing very slightly toward the end of the projection period as the rebasing of the index that will occur in 1998 becomes more distant. (The rebasing will substitute a market basket that reflects purchases of the 1993-1995 period for one from the 1982-1984 period.)

The projected unemployment rate will level off after 2000 at an average of 6.0 percent, the rate CBO estimates is consistent with real GDP remaining 0.3 percent below potential. Similarly, interest rates on three-month Treasury bills are projected to drop slightly through 2001 and then average 4.6 percent through 2007. The average interest rate on 10-year Treasury notes is projected to remain at the 6.2 percent level forecast for 1997 and 1998.

Changes Since May. Just as the new projections generally assume little change from current economic conditions, they also represent only slight changes from CBO's previous economic projections, particularly for years after 1998. (Those previous economic projections date from May 1996. Because CBO's regular August report, *The Economic and Budget Outlook: An Update*, was published last year just three months after the previous baseline report, CBO did not update the May economic forecast at that time.)

CBO now estimates that nominal GDP will be lower through 2007 than it projected last year, mainly because the rate of growth of the GDP price index will be lower over the entire period (by 0.5 percentage points in 1997 and 1998, but by only 0.1 percentage point in 1999 through 2006). Although the projected growth rate of the CPI-U for 1997 and 1998 is now a little lower than previously expected, for the entire 1997-2006 period it is slightly higher. Because the average growth rate of the CPI-U has not declined, the projected gap between it and the GDP price index has increased.

In CBO's new economic projections, corporate profits and wage and salary disbursements represent a larger share of GDP. Thus, the total federal tax base is pushed slightly higher by the change in economic assumptions even though nominal GDP is lower. Although the new forecast predicts higher interest rates on three-month Treasury bills in 1997 and 1998 than the May forecast did, CBO expects lower rates for three-month bills and 10-year Treasury notes (on average, about 0.2 percentage points lower) for 1999 through 2006. It now expects the unemployment rate to be lower than previously projected from 1997 through 2000 but the same after that.

The Baseline Budget Outlook

The deficit shrank to \$107 billion in fiscal year 1996, the fourth straight year of decline. As a percentage of GDP, it was 1.4 percent in 1996, the lowest level since 1974, when it was just 0.4 percent. CBO projects that if the Congress does not change budgetary policies (and if discretionary spending grows at the rate of inflation, subject to its statutory cap), the deficit will increase on average slowly through 2007. Under the alternative assumption that discretionary spending is not adjusted

for inflation but is instead frozen at the level of the 1998 cap, the deficit will shrink over that period.

The actual 1996 deficit was \$37 billion less than CBO projected last May. Partly because of lessons learned about the causes of that lower deficit, CBO's deficit projections for 1997 through 2006 are significantly lower than in May.

The Outlook for the Deficit. Under the baseline assumption that current budgetary policies continue without change, CBO projects that the deficit will most likely reverse its four-year decline in 1997 by rising to \$124 billion from \$107 billion the year before (see Summary Table 2). In 1998, however, the deficit is expected to drop slightly, for two reasons. First, the statutory limits on discretionary spending require 1998 discretionary outlays to be nearly \$4 billion below the level projected for 1997 (based on enacted appropriations). Second, CBO expects a number of asset sales and other transactions that provide one-time savings to occur in 1998.

The projected course of the deficit after 1998 depends on assumptions about the path of discretionary

spending. Revenues and mandatory spending programs, such as Social Security and Medicare, are generally governed by permanent law. As a result, assuming no change in current policies for those areas of the budget simply requires assuming no change in existing laws. (The baseline rules established by law require CBO to assume that large mandatory spending programs and excise taxes dedicated to trust funds continue even if the laws governing them are scheduled to expire.)

Discretionary spending, by contrast, is governed by annual appropriation acts (which in 1998 are subject to a statutory cap on total appropriations). Assuming no change in current laws in that area of the budget would literally imply no discretionary appropriations in 1998 or thereafter. Although making such an assumption would produce seriously misleading projections—it is clear that policymakers do not assume zero funding for the Department of Defense, the Federal Bureau of Investigation, and most of the other federal agencies primarily funded through annual appropriations—there is no single clear alternative. Thus, CBO prepares two sets of projections of discretionary spending.

Summary Table 2.
CBO Baseline Deficit Projections (By fiscal year)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Baseline Total Deficit in Billions of Dollars												
Discretionary Spending Grows with Inflation After 1998	107	124	120	147	171	167	188	202	219	254	266	278
Discretionary Spending Is Frozen After 1998	107	124	120	128	134	102	101	89	81	89	67	44
Baseline Total Deficit as a Percentage of GDP												
Discretionary Spending Grows with Inflation After 1998	1.4	1.6	1.5	1.7	1.9	1.8	1.9	2.0	2.0	2.2	2.2	2.2
Discretionary Spending Is Frozen After 1998	1.4	1.6	1.5	1.5	1.5	1.1	1.0	0.9	0.7	0.8	0.6	0.4

SOURCE: Congressional Budget Office.

NOTE: CBO's baseline assumes that current budgetary policies do not change and that discretionary spending equals the statutory limits in 1998.

In the first set, CBO assumes that appropriations will be adjusted each year for inflation. In the second, CBO assumes they will be frozen in dollar terms with no addition for inflation. Since both scenarios would produce discretionary spending in excess of the amount allowed by the statutory cap for 1998, both sets of projections assume that discretionary spending will equal the cap that year. The amount of the 1998 cap thus becomes the starting point for either adjusting discretionary spending for inflation or freezing it in the years after 1998.

Under the assumption that discretionary spending will grow at the rate of inflation after 1998, CBO projects that the deficit will generally increase at a relatively slow rate over the 1999-2007 period (see Summary Table 2). It will reach \$188 billion (1.9 percent of GDP) in 2002—the year by which both the President and the Congress have pledged to balance the budget. The deficit will climb to \$278 billion in 2007. At 2.2 percent of GDP, however, that amount would still be smaller than any deficit from 1980 through 1995.

The exception to the trend of growing deficits after 1998 occurs in 2001, when the deficit is projected to fall by \$4 billion. The decline results from a quirk of the calendar. Under current laws and practices, if federal payments (such as those to veterans, Supplemental Security Income recipients, and Medicare managed care providers) that are normally paid on the first day of the month would be due on a weekend or a federal holiday, the payments are made on the last business day of the preceding month. When that happens to a payment due on October 1—the beginning of the government's fiscal year—it has the effect of shifting billions of dollar of spending to the preceding year. Because October 1, 2000, falls on a Sunday, the affected programs will make 13 benefit payments in fiscal year 2000 and only 11 in fiscal year 2001. Moreover, because the underlying growth in the deficit is relatively slow, that shift is enough to push the deficit in 2001 below the previous year's level and to produce a relatively large increase in the deficit in 2002, even though the real trend in the deficit does not change much during that time.

A similar shift in payments occurs later when benefits from 2006 shift into 2005 and benefits from 2007 shift into 2006, producing a pattern of 13, 12, and 11 payments a year. But because there is not a jump directly from a 13-payment year to an 11-payment year,

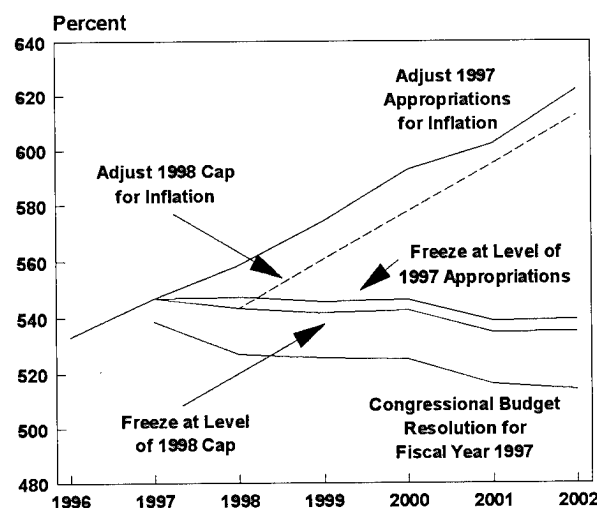
and because the underlying increase in the deficit is larger then, the projected deficit does not drop in 2006 or 2007.

Spending for two programs—Medicare and Medicaid—continues to drive the increases in the deficit. Although CBO has lowered its projected growth rates for both programs, it still expects mandatory spending for the two programs combined (excluding income from Medicare premiums) to climb at an average rate of just over 8 percent a year from 1997 through 2007. By contrast, all other entitlement spending, including Social Security, is expected to grow by less than 5 percent a year. Revenues are projected to increase at an average annual rate of 4.5 percent. Because projected discretionary spending (even adjusted for inflation) and net interest costs will rise at an average rate of about 3 percent a year, the deficit would fall over the 1997-2007 period if Medicare and Medicaid grew no faster than other mandatory spending.

CBO projects that even with spending for Medicare and Medicaid growing by about 8 percent a year, the deficit would still go down if the Congress froze discretionary spending at the level of the 1998 cap. Such a freeze would put the deficit at \$101 billion (1.0 percent of GDP) in 2002 and \$44 billion (0.4 percent of GDP) in 2007. Freezing discretionary spending at that level, however, would require a significant reduction in the goods and services that are funded through discretionary appropriations. Complying with the cap in 1998 will require the Congress to cut outlays by \$15 billion (3 percent) from the level needed to maintain the purchasing power of 1997's appropriations (see Summary Figure 5). Under a freeze at the level of the 1998 cap, discretionary outlays would be worth 14 percent less than the 1997 amount by 2002 and 26 percent less by 2007.

The Congressional budget resolution for fiscal year 1997 assumed that the Congress would cut discretionary appropriations in real terms. (It envisioned discretionary outlays totaling \$514 billion in 2002—\$21 billion below the amount in CBO's baseline with a freeze.) In 1997, however, the Congress appropriated \$10 billion more in discretionary budget authority than the resolution assumed. As a result, even if discretionary appropriations were frozen at the 1997 enacted level, outlays in 1998 would be \$4 billion higher than the discretionary cap allows and \$20 billion higher than last

Summary Figure 5.
Discretionary Outlays Under Various
Assumptions (By fiscal year)



SOURCE: Congressional Budget Office.

year's budget resolution assumed. The increase in outlays in 1997 was offset by one-time savings resulting from legislative provisions in the appropriation bills—which required such actions as recapitalizing the Bank Insurance Fund and having the Federal Communications Commission auction additional portions of the electromagnetic spectrum. But the higher-than-planned level of discretionary appropriations in 1997 suggests that achieving the discretionary savings anticipated in 1998 and future years will not be easy.

Changes Since May. In last May's *Economic and Budget Outlook: Fiscal Years 1997-2006*, CBO projected a deficit of \$144 billion for fiscal year 1996.¹ The Department of the Treasury reported an actual deficit of \$107 billion for that year (which ended on September 30, 1996). Federal revenues and health care spending accounted for much of the difference. Revenues were \$24 billion higher than CBO had projected, in part because of an unanticipated surge in final tax payments for 1995 made in April 1996. Meanwhile,

spending for Medicare and Medicaid ended up \$9 billion lower than expected.

Revenues and health care spending also account for much of the revision in CBO's deficit projections for 1997 through 2006 (see Summary Table 3). Changes in the economic outlook contribute to an increase in projected revenues for a number of years after 1996, but that effect fades over time. By contrast, reductions in spending for Medicare and Medicaid account for a substantial part of the change in CBO's projected deficits throughout the 1997-2006 period.

Changes in the economic forecast produce a \$23 billion increase in projected revenues for 1997. Although the revised economic assumptions have lower nominal GDP in 1997 (and all other years in the projection period), an increase in the projected share of GDP represented by taxable income pushes revenues up. That increase grows smaller over time, however, and by 2005 it does not offset the effect of lower nominal GDP. As a result, the change in economic assumptions causes a \$5 billion decrease in projected revenues in 2005 and an \$11 billion decrease in 2006. In effect, the higher level of income recorded in 1996 starts the revenue projections at a higher level now than last May, but a slower rate of growth brings revenues back down by 2005 near the levels assumed in May.

Because Medicare and Medicaid spending in 1996 was \$9 billion lower than CBO anticipated last year, a different starting point for new projections for those programs was also created. In addition, another year of relatively small increases in spending (at least for those two programs) caused CBO to reduce slightly its assumed rate of future growth in Medicare and Medicaid spending. As a result, the reductions in projected spending for the two programs grow over time—from \$13 billion in 1997 to \$31 billion in 2002 and \$59 billion in 2006.

Two other changes account for most of the remaining drop in the deficit projections. First, CBO estimates that the welfare reform legislation enacted by the Congress and the President last August will lower mandatory spending significantly over the 1997-2006 period. In 2002, projected savings from the legislation total \$13 billion. Second, CBO expects net interest payments to be substantially lower than anticipated last May (\$32 billion lower in 2002). Part of the net inter-

1. CBO revised that estimate to \$116 billion in its August 1996 report, *The Economic and Budget Outlook: An Update*. Because that report was published so soon after the previous outlook report in May, it was more abbreviated than the usual August update and revised only the budget projections for 1996.

est reductions after 1999 result from lower projected interest rates in those years, but most of the interest savings occur because higher revenues, lower Medicare and Medicaid costs, savings from welfare reform, and other revisions to the baseline projections decrease the amount of federal debt.

Only in 1998 do those other revisions total more than \$18 billion. Several asset sales and timing shifts in that year have prompted pronounced changes to CBO's May projections. CBO estimates that the newly authorized sale of the United States Enrichment Corporation and of a portion of the naval petroleum reserve will bring in almost \$3 billion in offsetting receipts in 1998. CBO also believes that Federal Communications Commission auctions of parts of the electromagnetic spectrum will produce almost \$6 billion more in proceeds in 1998 than previously anticipated (most of that represents a shift from 1997 to 1998). In addition, CBO projects that the net receipts of the Bank Insur-

ance Fund and the Savings Association Insurance Fund will be almost \$2 billion higher than it thought last May and that discretionary spending will be \$3 billion lower. The change in discretionary spending results from the statutory requirement to adjust the 1998 spending cap to reflect current projections of inflation that are lower than the Office of Management and Budget anticipated in last year's budget submission.

Uncertainty in Budget Projections

The Congressional Budget Office's baseline projections represent its estimate of the most likely outcome for the economy and the budget. Of course, a wide range of alternative results is feasible. In fact, because the U.S. economy and the federal budget are so large and com-

Summary Table 3.
Changes in CBO Deficit Projections Since May (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
May 1996 Baseline Deficit	144	171	194	219	244	259	285	311	342	376	403
Changes											
Revenue changes from revised economic assumptions ^a	-20	-23	-19	-17	-15	-12	-9	-5	-1	5	11
Medicare and Medicaid changes from revised technical assumptions	-9	-13	-17	-18	-17	-31	-31	-37	-44	-42	-59
Mandatory-spending changes from enactment of welfare reform	0	-3	-8	-9	-10	-11	-13	-14	-15	-17	-18
Net interest changes											
Revised economic assumptions	b	6	3	1	-3	-6	-8	-8	-9	-10	-11
Revised technical assumptions	1	b	-1	1	1	b	-1	-1	-1	b	1
Debt service	-1	-3	-7	-11	-15	-19	-24	-30	-36	-43	-50
Subtotal	1	3	-4	-10	-16	-24	-32	-39	-46	-53	-60
Other changes	-9	-10	-25	-18	-14	-13	-12	-14	-17	-15	-12
Total Changes	-37	-47	-74	-72	-73	-92	-97	-109	-123	-122	-138
January 1997 Baseline Deficit	107	124	120	147	171	167	188	202	219	254	266

SOURCE: Congressional Budget Office.

a. Increases in revenues are shown with a negative sign because they reduce the deficit.

b. Less than \$500 million.

plex, there is little chance that they will precisely follow the course that CBO lays out in its baseline. The likely deviations from that course generally grow larger the farther the projections extend into the future.

CBO has estimated how various hypothetical deviations in the economy from the baseline assumptions would affect budget outcomes. Such deviations, of course, are not the only reasons that CBO's projections could prove to be off the mark; changes in how fast spending grows for programs such as Medicare or Medicaid, or unexpected events such as the savings and loan crisis, could significantly alter the budget. The likelihood that the budget will veer off the course that CBO has plotted should make policymakers wary of staking too much on the accuracy of its current baseline projections (or anyone else's projections) of what the deficit will be several years from now.

Alternative Economic Assumptions and Their Budgetary Impact

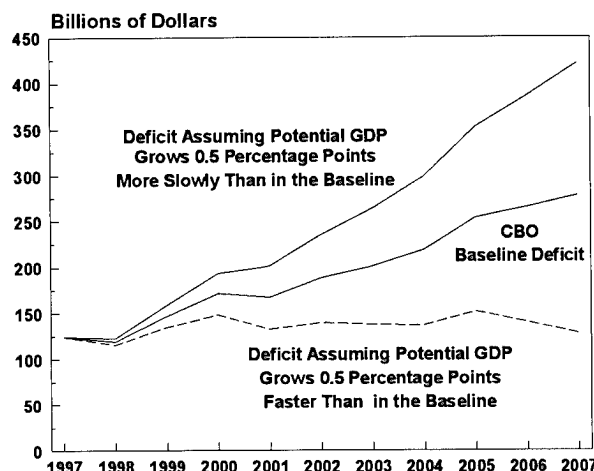
To show how deviations from its baseline economic assumptions could significantly raise or lower the deficit from the levels projected in the baseline, CBO developed two broad sets of alternative economic assumptions. The first set assumes that potential GDP grows at a rate other than the one assumed in the baseline. The second set differs from the baseline—which essentially projects a smooth economic path that reflects the average historical probability of a boom or recession in any year—by incorporating cyclical swings in the economy into the projections.

In the first set, CBO examined two specific assumptions: an increase of 0.5 percentage points in the annual growth rate of potential GDP, and a decrease of 0.5 percentage points. Such changes are small compared with the historical variation in the growth of potential GDP (which equals the sum of growth of the potential labor force and growth of potential productivity). CBO projects that if potential GDP grew half a percentage point faster than expected, the deficit would be about \$50 billion lower than the baseline level in 2002 (see Summary Figure 6). The budgetary effects would increase over time, pushing the deficit down by about \$150 billion in 2007. If the growth of potential output was slower than expected, projected deficits would be higher by roughly the same amounts.

In the second set, CBO developed an optimistic alternative in which real GDP is significantly above potential GDP for an extended period (an economic boom), and two pessimistic alternatives in which the economy suffers a recession. The hypothetical boom mimics the experience of the late 1960s, although its fluctuation is only half as large as occurred then. Under the assumption that the economy rises above potential through 2002 before experiencing a mild recession that brings it back in line with baseline assumptions, the projected deficit in fiscal year 2002 would be more than \$100 billion lower than in CBO's baseline (see Summary Figure 7). By 2007, however, the budgetary effects of the boom would have largely faded; the deficit would remain a little below the baseline because of small savings in net interest costs resulting from the reduced federal deficits and borrowing in earlier years.

Under the pessimistic alternatives, the economy experiences a downturn roughly the size of the 1990 recession. Because the timing of such a recession is crucial to the budgetary effect in any year, CBO used two different starting points for those alternatives. If the economy experienced a mild boom in 1997 and the first half of 1998 and then entered the recession, it would probably recover fully by 2002. In that case, CBO projects, the deficit would be only about \$30 billion higher in fiscal year 2002 than in the baseline. By 2007, the difference would be even smaller. As in the

Summary Figure 6.
Deficits Under Alternative Assumptions About the Growth of Potential GDP (By fiscal year)



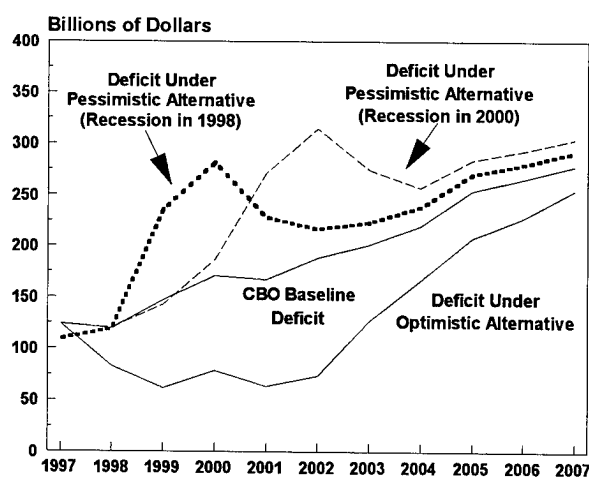
SOURCE: Congressional Budget Office.

case of the optimistic alternative, the enduring budgetary impact stems from the effects that earlier changes in the deficit would have on federal debt-service costs. If instead the mild boom of was delayed until 1999 and the recession began late in 2000, the maximum effect on the budget would be felt in fiscal year 2002, when the projected deficit would be more than \$100 billion higher than in the baseline. Even with the recession delayed for two years, though, the budgetary effects would still largely disappear by 2007.

Other Risks to the Baseline Projections

Many factors other than changes in the economy could cause the budget to vary from CBO's current projections. For example, CBO now expects spending for Medicare and Medicaid to increase at an average annual rate of just over 8 percent during the next 10 years. If that spending instead grew at just over 10 percent a year (a little slower than it did during the past decade), CBO estimates that the deficit would be about \$50 billion higher in 2002 and almost \$150 billion higher in 2007. In addition, although CBO does not expect the deposit insurance crisis of the late 1980s and early 1990s to recur, it certainly is not safe to assume that the budget will experience no unexpected shocks for the next 10 years.

Summary Figure 7.
Deficits Under Alternative Cyclical Projections of the Economy (By fiscal year)



SOURCE: Congressional Budget Office.

Because it is hard to imagine what unexpected shocks might occur, CBO has not developed specific assumptions about how a combination of noneconomic surprises could affect the deficit. However, based on experience and on the estimates of what changes in the growth rate of Medicare and Medicaid would do to the budget, CBO believes that changes in the deficit from noneconomic factors could easily equal or exceed the estimated effects of the alternative economic assumptions. Such changes could come in addition to the economic effects, or they could offset them. Recognizing that the economy is unlikely to perform exactly as assumed, and that a host of other factors will affect the budget in unforeseen ways, CBO produces middle-of-the-road baseline projections that reflect the range of possible outcomes.

The Economic and Budgetary Implications of Balancing the Budget

CBO projects that under current policies the deficit will total \$188 billion in 2002, the year in which both the Congress and the President have pledged to balance the budget. But policymakers need not produce \$188 billion in direct policy savings in 1998 to balance the budget, because any savings in that or previous years will reduce the amount that the government has to borrow to finance the deficit and, therefore, will reduce its interest costs. Moreover, substantial cuts in the deficit—such as those needed to balance the budget in 2002—will have a noticeable feedback effect on the economy, altering interest rates, economic growth, and the share of GDP represented by corporate profits. The budgetary effects of those changes—the so-called fiscal dividend—can also be factored into plans to balance the budget.

CBO estimates that if the Congress and the President enacted a credible plan that would balance the budget in 2002, the rate of growth of gross national product would increase slightly from the level in CBO's baseline economic assumptions. More important, interest rates would decline by 0.7 percentage points (70 basis points) by 2000. CBO expects that as a result of that change, corporate profits would increase as a share of GDP.

Those economic benefits from balancing the budget by 2002 are smaller than CBO estimated last May. The reason is that the benefits spring from reducing federal borrowing and debt; and because CBO's current baseline deficits are substantially lower than in May, eliminating the deficit does not entail as large a reduction in federal borrowing and debt. Thus, the economic benefits from eliminating the deficit are also reduced. Those benefits have not simply vanished into thin air, however. Because baseline deficits are lower now, CBO's baseline projections for interest rates are also generally lower. In effect, part of the fiscal dividend estimated last May has already been achieved and is incorporated into the revised baseline projections.

CBO estimates that the economic effects of balancing the budget would reduce spending and increase revenues by a total of \$34 billion in 2002 (see Summary Figure 8). That fiscal dividend is a little less than half the size CBO estimated last May—not only for the reasons noted above, but because any balanced budget plan now would start later than CBO previously assumed.

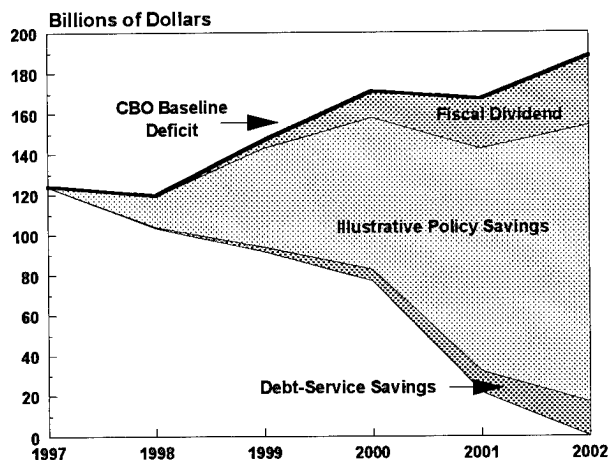
Adding the fiscal dividend to CBO's baseline projections yields a deficit of \$154 billion in 2002 (down from \$210 billion last May). Projections that reflect the fiscal dividend do not represent an alternative baseline. Instead, they are a useful tool for calculating how

much savings lawmakers need to produce from policy changes to eliminate the deficit. As such, they are likely to provide the starting point for Congressional consideration of plans to balance the budget. And CBO will use them to analyze the President's budget proposal or any other plan intended to balance the budget in 2002.

The actual amount of policy savings required to balance the budget depends in part on the timing of the policy changes that are chosen. Making larger policy changes early in the 1998-2002 period will produce larger cumulative savings over the five years. But because bigger policy changes early in the period will also increase debt-service savings in 2002, they reduce the amount of policy savings needed in that year to eliminate the deficit.

In estimating the fiscal dividend, CBO assumed that the Congress and the President would enact legislation producing significant savings beginning in 1998. (Delaying policy changes could delay the fiscal dividend beyond what CBO has estimated.) In CBO's illustrative deficit reduction plan, debt-service savings would contribute \$17 billion in 2002 toward balancing the budget (see Summary Figure 8). Since the fiscal dividend totals an estimated \$34 billion in that year, policy savings of \$137 billion in 2002 would be required to eliminate the deficit.

Summary Figure 8.
The Fiscal Dividend and an Illustrative Path to a Balanced Budget (By fiscal year)



SOURCE: Congressional Budget Office.

Conclusion

CBO projects that if current policies continue, the deficit will begin growing again in 1997 after four years of decline. But that growth is expected to be moderate. Assuming that discretionary spending increased at the rate of inflation, the deficit as a percentage of GDP would rise from 1.4 percent in 1996 to 2.2 percent in 2007. That level is well below the average in recent years, although higher than the average in the two decades following World War II.

Policymakers should be cautious about this relatively good news, for two reasons. First, although the baseline projections represent CBO's estimate of the most likely budgetary outcomes, the actual course of the deficit could easily be less favorable. Second, because the current baseline projections run only through

2007, they do not show the detrimental effect that the retirement of the baby-boom generation (combined with continuing growth in per-person health care costs) will have on the deficit and debt after about 2010. Despite the somewhat improved budget outlook reflected in these projections, the Congress and the President will still need to significantly cut entitlement and other spending or raise taxes to avoid unacceptably high deficits and debt in the next 40 years or so.

Both of those cautions highlight the risks of not addressing the deficit. Even if CBO's baseline projec-

tions prove correct, the deficit will not disappear without changes in policy; if CBO has significantly understated the deficits that would occur under current policy, enacting legislation now could help keep the deficit from exploding as the outlook deteriorates. Whether or not CBO's projections for the next 10 years are too optimistic, a major effort will be required to ensure budgetary stability in the next century. Taking action now to reduce the deficit in the near term would contribute to that effort and make the additional policy changes required in the future less painful.

The Economic Outlook

Entering 1997, the U.S. economy marked its 69th consecutive month of expansion, making this recovery the third longest since World War II. If the economy continues growing through the end of 1998, the expansion will have been the second longest on record—and no clear signs signal that an end is imminent.

The Congressional Budget Office (CBO) forecasts that under current budgetary policies, growth in real gross domestic product (GDP) will average 2.2 percent a year in 1997 and 1998, the same pace recorded in 1995 and 1996 (see Table 1-1 and Figure 1-1). The unemployment rate is forecast to rise slowly over the next two years, whereas the growth in the consumer price index (CPI) remains approximately stable. Although some signs of higher inflation appear in other price measures, monetary authorities have maintained a mildly restrictive stance for quite some time and the anticipated pickup in inflation appears to be too slight to warrant further tightening. As a result, interest rates should remain fairly flat over the near term.

If one judges solely by a few key measures (unemployment and operating rates at the nation's factories), current economic conditions strongly resemble those that prevailed in the period leading up to the 1990 recession. But important differences do exist. For one thing, the current recovery has been more moderately paced than was the case during the period leading up to the 1990 recession. Moreover, the imbalances that existed in 1990—principally, weakened financial institutions and the substantial tilt in corporate balance sheets toward debt at the expense of equity—are not apparent

today, leaving CBO little reason to predict a recession over the near term. Nonetheless, business cycles are always difficult to predict, and cyclical turning points usually catch analysts by surprise.

Beyond the next two years, CBO's projections reflect historical patterns. From 1998 through 2007, the economy is projected to average 2 percent growth, a rate of growth that can be sustained without an increase in inflation. That rate, however, is much slower than the average growth over the entire postwar period. Two factors restrain the growth of capacity: slower than average growth in labor supply as a result of shifting trends in demographics and participation in the labor force, and a more temperate rate of growth in productivity than what prevailed during the first half of the postwar period.

The State of the Economy

Despite some inflationary pressures, the moderate growth of the past two years should continue. The underlying rate of inflation remained stable in 1996, even as employment grew rapidly—a surprise to many analysts. Several special factors—statistical changes, a slowing in the growth of medical care prices, declines in import prices, and a plunge in computer prices—dampened the rate of inflation over the past year. CBO believes those to be temporary factors—in their absence, upward pressures on inflation will become evident over the next two years.

Labor Markets and Inflation

Labor markets tightened in 1996, but price inflation has remained remarkably subdued. Rapid growth in employment pushed down the unemployment rate to 5.3 percent for the last six months of 1996 (its lowest six-month average since early 1990), even though growth in the civilian labor force—the number of people desiring work—accelerated in 1996.

Although growth in money wages also quickened over the year to 3.3 percent by the third quarter, continued slow growth in benefits—apparently the result of slow growth in employer-paid premiums for health insurance—has moderated advances in labor compensation. Growth of total compensation in 1996 remained near the 2.8 percent mark of 1995. Many analysts, including those at CBO, expected the increase in labor market pressures to spark price inflation. In fact, how-

Table 1-1.
Economic Projections for Calendar Years 1997 Through 2007

	Estimate 1996 ^a	Forecast		Projected								
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Nominal GDP (Billions of dollars)	7,570	7,916	8,277	8,678	9,097	9,532	9,984	10,453	10,938	11,443	11,969	12,518
Nominal GDP (Percentage change)	4.4	4.6	4.6	4.9	4.8	4.8	4.7	4.7	4.6	4.6	4.6	4.6
Real GDP (Percentage change)	2.3	2.3	2.0	2.2	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9
GDP Price Index (Percentage change)	2.1	2.3	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
CPI-U ^b (Percentage change)	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1
Unemployment Rate (Percent)	5.4	5.3	5.6	5.8	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.0	5.0	5.0	4.9	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Ten-Year Treasury Note Rate (Percent)	6.4	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Tax Bases (Billions of dollars)												
Corporate profits	646	661	681	692	707	727	751	780	814	850	888	932
Wage and salary disbursements	3,628	3,798	3,951	4,127	4,314	4,512	4,719	4,935	5,159	5,393	5,637	5,893
Other taxable income	1,613	1,691	1,777	1,881	1,986	2,086	2,185	2,285	2,388	2,495	2,606	2,721
Tax Bases (Percentage of GDP)												
Corporate profits	8.5	8.3	8.2	8.0	7.8	7.6	7.5	7.5	7.4	7.4	7.4	7.4
Wage and salary disbursements	47.9	48.0	47.7	47.6	47.4	47.3	47.3	47.2	47.2	47.1	47.1	47.1
Other taxable income	21.3	21.4	21.5	21.7	21.8	21.9	21.9	21.9	21.8	21.8	21.8	21.7

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Incorporates data for the first three quarters of 1996 published November 27, 1996.

b. CPI-U is the consumer price index for all urban consumers.

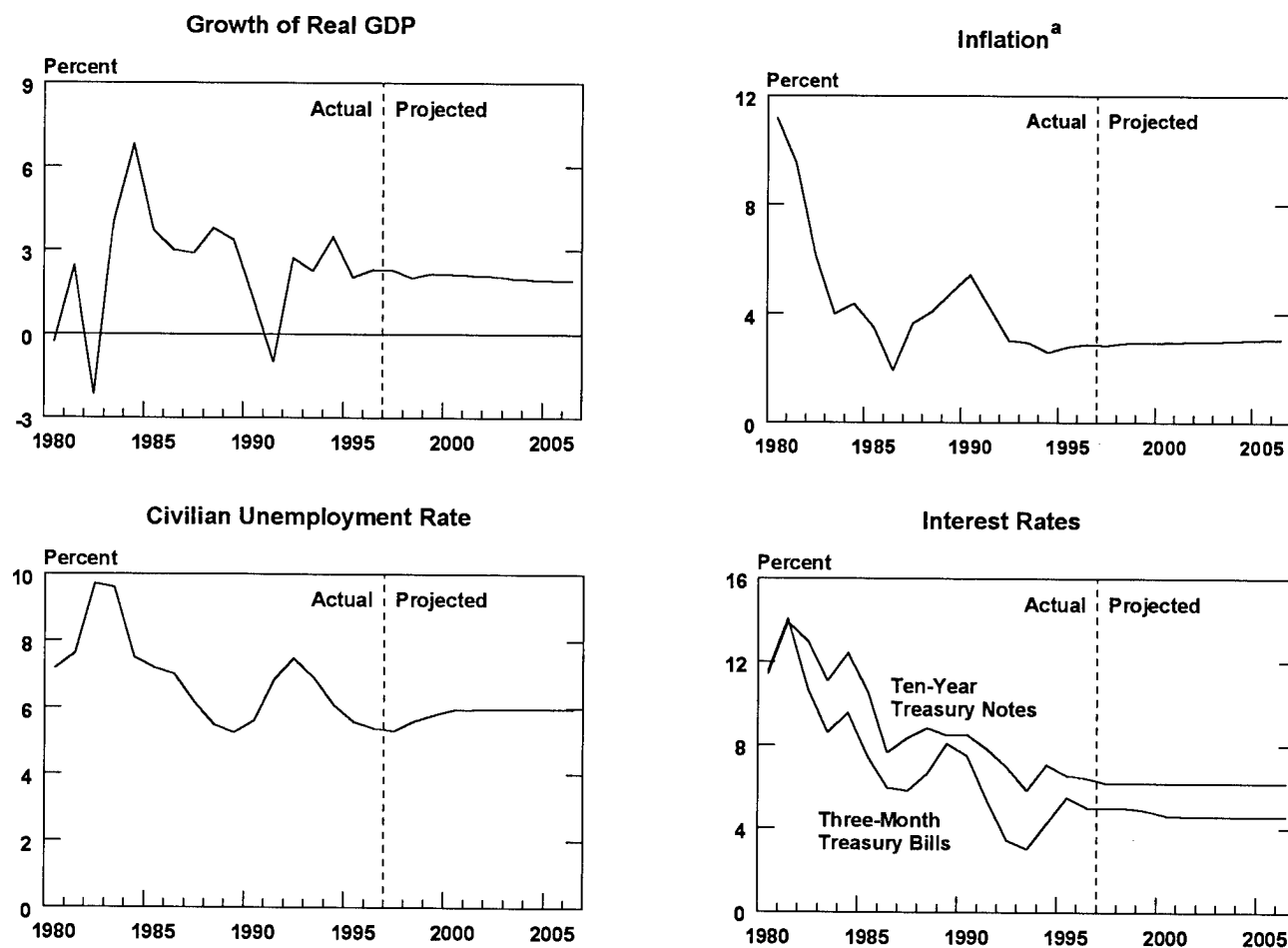
ever, the Bureau of Labor Statistics (BLS) reported that the underlying rate of inflation was slightly lower in late 1996 than in late 1994 (BLS calculates the underlying rate by removing the effects of food and energy prices from overall consumer price inflation).

Many economists have expected inflationary pressures to build largely because of the relatively low rate of unemployment that has prevailed since late 1994. CBO estimates that the rate of unemployment below

which inflationary pressures start to build (the nonaccelerating inflation rate of unemployment, or NAIRU) is currently about 5.8 percent. A rule of thumb is that for each year the unemployment rate is below NAIRU by 1 percentage point, inflation will increase by about half of a percentage point by the end of two years.

If one applies that rule to the recent data, the underlying rate of inflation should have increased by about 0.2 percentage points between late 1994 and late 1996.

Figure 1-1.
The Economic Forecast and Projections



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

NOTE: All data are annual values; growth rates are year over year. Annual values for 1996 include CBO's estimate for the fourth quarter.

a. Consumer price index for all urban consumers (CPI-U). The treatment of home ownership in the official CPI-U changed in 1983. The inflation series in the figure uses a consistent definition throughout.

Furthermore, if the unemployment rate remains near 5.4 percent by the end of 1997, as CBO predicts it will, the underlying rate of inflation should rise by about another 0.4 percentage points by late 1998.

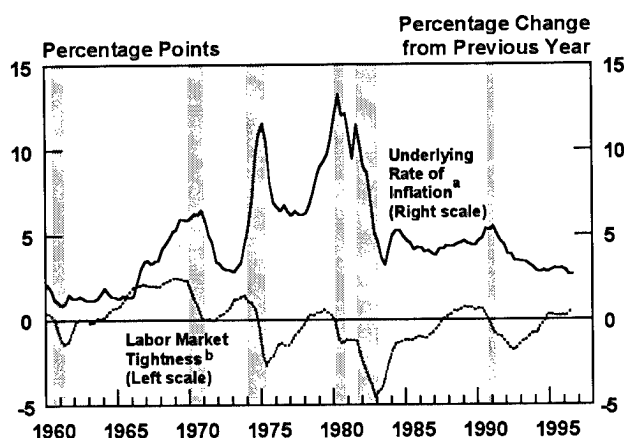
From a historical perspective, the predicted upward drift of inflation between late 1994 and late 1996 is quite small and could easily be swamped by other factors (see Figure 1-2). In fact, the BLS has estimated that its technical revisions to the CPI in January 1995 and mid-1996 may have lowered the growth rate of the CPI by about 0.2 percentage points at an annual rate. A sharp slowdown in the medical care component of the CPI also contributed to the tempering of measured price changes. In addition, import prices fell between mid-1995 and mid-1996, and that decline may have temporarily dampened CPI inflation. Finally, computer prices dropped at a more rapid rate in 1995 and 1996 than they had in previous years.

Measures of inflation based upon the national income and product accounts (NIPA) also grew more slowly in 1996 than in 1994 and 1995. By the third

quarter of the year, the overall GDP price index had grown a mere 2.1 percent above its 1995 level, slipping 0.3 percentage points from the pace of the previous two years. As it turns out, however, essentially the same special factors that restrained CPI inflation are operating with even greater impact on the GDP price index. For example, computer prices are weighted more heavily in the NIPA measures of inflation than they are in the CPI. As a result, the accelerated decline in computer prices slows inflation in the NIPA price measures more than in the CPI measure.

Some economists have argued, based on the recent behavior of inflation and unemployment, that most estimates of the NAIRU (roughly between 5½ to 6 percent) are too high and that the NAIRU has declined in recent years. Although such a change could have occurred, CBO believes that the evidence is against it. Such a change, if it happened, would take place gradually over the course of several years. Yet the relationship between unemployment and inflation deteriorated not slowly, but abruptly, beginning in the middle of 1995. Such a drastic change over a short period suggests that something other than a change in the structure of the labor market is responsible. CBO believes that the rate of inflation is being restrained by factors—such as medical costs, computer prices, and technical revisions to the CPI—that are unrelated to the relationship between demand and the economy's capacity to produce. Therefore, the agency does not find any compelling evidence to change the estimate of the NAIRU.

Figure 1-2.
Inflation and Tightening in the Labor Market



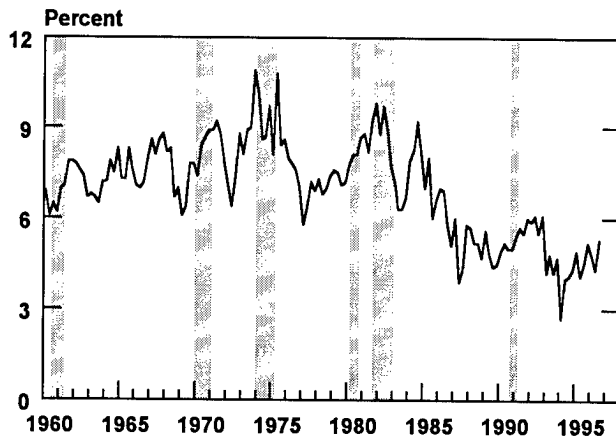
SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

- Consumer price index for all urban consumers (CPI-U), excluding food and energy.
- Tightness in the labor market is measured by the excess of CBO's estimate of the nonaccelerating inflation rate of unemployment (NAIRU) over the actual unemployment rate. It is an indicator of future wage inflation.

Households

In 1996, consumer spending moved along at the same moderate pace as in 1995. Led by spending on durable goods, overall consumption grew 2.1 percent over the four quarters ending in the third quarter of 1996. However, that advance fell short of the 3.1 percent growth posted by personal disposable income so that the personal saving rate rose. But even with its increase over the past two years to 5.3 percent in the third quarter of 1996, the personal saving rate nevertheless remains well below the 8 percent average that prevailed up to a decade ago (see Figure 1-3). Moreover, evidence is lacking that the saving rate will change substantially from the current level. Hence, household consumption is likely to follow growth in incomes.

Figure 1-3.
The Personal Saving Rate



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Although the underlying trend in personal income augurs well for future consumer expenditures, many analysts are concerned about household balance sheets. Increasingly heavy household debt burdens, rising delinquency rates on consumer loans, and increased rates of personal bankruptcy have prompted concerns that households may curtail spending.

Those may not be serious problems, however. The rise in household debt has been more than matched by an expansion of household financial assets: whereas household debt grew at an annual rate of 7.4 percent over the first three quarters of 1996 (the most recent data available), the value of household financial assets stepped up at an 8.7 percent annual rate. In addition, current delinquencies on consumer loans remained below the rates that prevailed through much of the 1980s and early 1990s.

Although the stock market has risen to heights that some consider unsustainable, a sudden plunge is not likely to have a marked effect on consumption. Statistical estimates of the effect of wealth on consumption spending are almost always quite small.¹ The 1987 stock market crash, for example, did little to discourage

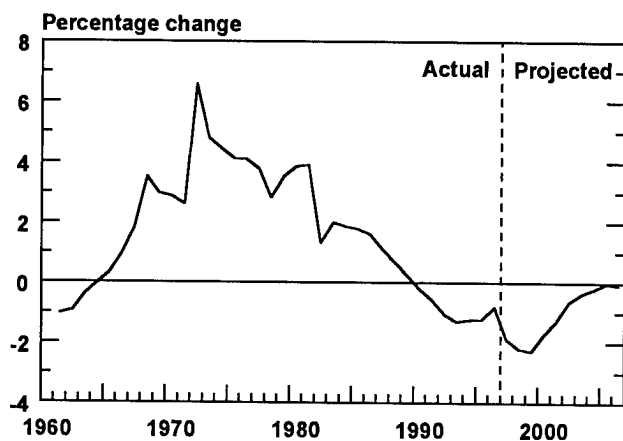
consumer spending. Moreover, the recent rise in the stock market has not yet found its way into consumption. Indeed, even if a turnaround in the stock market was to occur, it would have no immediate effect on consumption.

For housing, though, the picture is less clear. After surging in the first half of 1996, growth in housing starts slackened sharply in the second half of the year. Mortgage rates climbed during much of the year, depressing affordability measures. The burst of home sales early in the year may have been the result of buyers trying to avoid even higher rates later. In any case, even if the spurt in starts results in growth in residential fixed investment over the near term, the fundamental factors that are likely to thwart rapid growth in housing over the long run may check housing activity over the next two years as well. Such factors include slower rates of household formation and a decline in the population that is 25 to 34 years old (the portion of the population that is most likely to be first-time home buyers; see Figure 1-4).

Businesses

As it has since 1993, growth in business investment spurred overall growth in 1996. But the pace of capital

Figure 1-4.
Population That Is 25 to 34 Years Old



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of the Census.

NOTE: Census projections were spliced onto historical growth rates available through 1996.

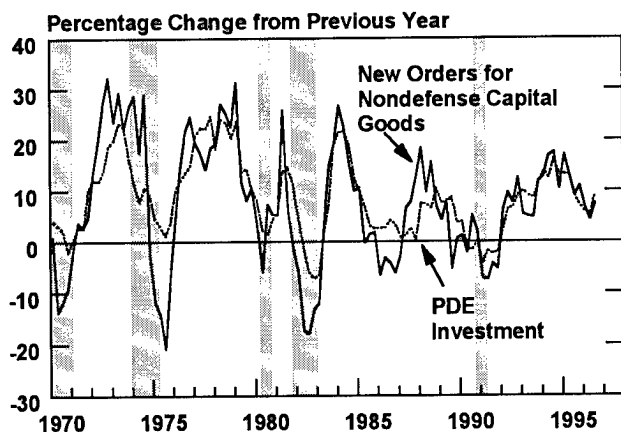
1. For a recent analysis of this see J. M. Poterba and A. A. Samwick, "Stock Ownership Patterns, Stock Market Fluctuations, and Consumption," *Brookings Papers on Economic Activity*, no. 2 (1995), pp. 295-372.

expenditures by businesses slackened for most major categories of investment. That shift is consistent with both the duration of the investment boom and current expectations of only moderate future growth in demand.

The growth of nonresidential construction tumbled in 1996, but spending still managed to advance a respectable 3.9 percent over the first three-quarters of the year. Recent indicators of future construction spending are mixed. On the one hand, recent data on construction contracts—a leading indicator of construction spending—were substantially below levels of a year ago, hinting at a further slow down in building construction. On the other hand, vacancy rates for commercial offices and hotels have been tapering since the early 1990s. In addition, monthly indicators suggest that nonresidential construction surged in the closing months of 1996. CBO does not expect nonresidential construction to hinder growth of GDP over the near term.

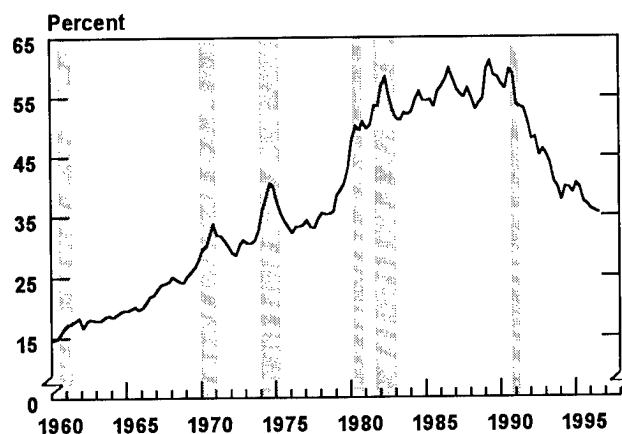
Business spending on capital equipment is the category of demand that has grown most rapidly in the current expansion. Total spending on equipment grew 13.4 percent in the first three quarters of 1996, similar to the 1994 pace and somewhat swifter than that of 1995. But spending on equipment may be starting to falter. Growth of new orders for capital goods has been slowing gradually since mid-1995 (Figure 1-5). A thin-

Figure 1-5.
New Orders for Nondefense Capital Goods and Investment in Producers' Durable Equipment



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of the Census.

Figure 1-6.
Interest Payments by Businesses as a Share of Cash Flow



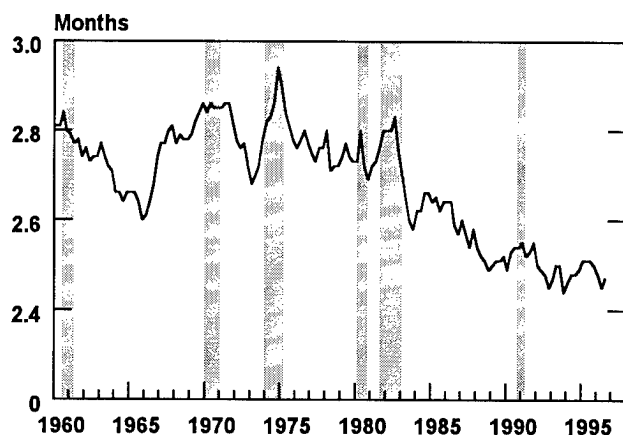
SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

ner stream of new orders may herald more moderate advances in expenditures on equipment over the near term. Such advances would be consistent with the increase in the capital stock over the course of the investment boom, the more moderate growth anticipated for overall output, and the milder growth anticipated for corporate cash flow than has occurred in recent years.

Corporate balance sheets are much healthier now than they were in the late 1980s and, as a result, the nonfinancial corporate sector has become less vulnerable to movements in short-term interest rates than it was a decade ago. One indication of that change is that the burden on businesses to service their debts is much smaller today than in the 1980s.

Since 1990, interest payments as a share of corporate cash flow have fallen more than 20 percentage points from their peak in the last decade (see Figure 1-6). The reason: corporations have been more disciplined in accumulating debt during the current expansion than they were during the merger boom of the 1980s. High and still rising equity prices have encouraged that discipline. Although merger activity has revived in recent years, corporations seem to be financing those mergers by a more balanced combination of debt and equity issuance than was the case in the 1980s.

Figure 1-7.
Ratio of Real Business Inventories to Sales



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Accumulation of inventories waned somewhat last year. Compared with historical patterns, the ratio of inventory stocks to final sales remains low enough to make a debilitating swing in inventory investment unlikely (see Figure 1-7). Many analysts believe that the inventory-sales ratio has dropped since the mid-1970s because businesses have adopted more efficient systems for managing inventories. If so, swings in inventories may play a smaller role in future business cycles than they did in the past.

International

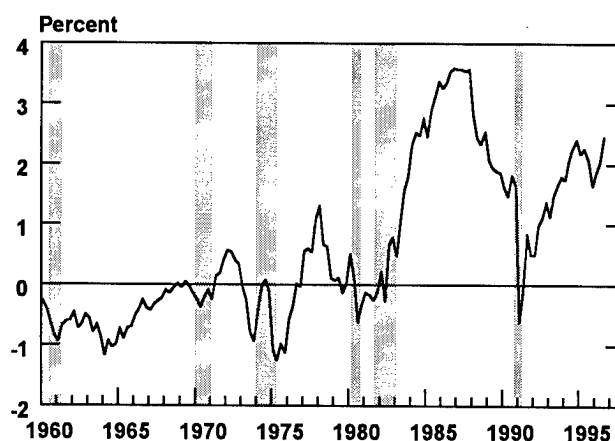
After narrowing in the second half of 1995, the U.S. trade deficit reversed gears in 1996, deteriorating markedly. Lackluster foreign recoveries, relatively robust U.S. import demands, and, to a lesser extent, a stronger dollar all contributed to the recent increase in the current account deficit (see Figure 1-8).

Unfortunately, given the international outlook, net exports are not likely to improve quickly enough to boost U.S. growth over the near term. Exports will probably not strengthen anytime soon since the recovery of foreign economies is expected to remain modest. Similarly, imports are expected to grow in tandem with the middling but steady growth in the U.S. economy.

Many U.S. trading partners are recovering, but their expansions are modest and fragile. For example, over the past four years, Japan has increased its fiscal deficit in order to revitalize its economy. In fact, however, the fiscal stimulus has only kept Japan's recession from worsening. Moreover, now that the Japanese government has begun to rein in its deficit with a tighter fiscal policy, the prospects for Japan's recovery have clouded once again, prospects that are reflected by sharp declines in the Tokyo stock market. In spite of recent declines in the unemployment rate, rising growth in wages, a weak yen, and near-zero interest rates, Japan's recovery is precarious. Private consumption has already weakened, and the ending of the income tax rebate and the increase in the value-added tax planned for April 1997 are apt to weaken consumption further. With an uncertain recovery and a weak yen, Japan's demand for U.S. exports is not likely to pick up strongly in the near term.

The demands of other Asian economies for U.S. exports are not expected to pick up either. Growth in those countries, though still at an impressive 7 percent rate in 1996, has slowed unmistakably from the double-digit advances posted in previous years. As they are not expected to grow much faster in 1997 than in 1996, U.S. exports to those Asian countries are unlikely to increase substantially.

Figure 1-8.
Current-Account Deficit as a Percentage of GDP



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Although two other of the largest U.S. trading partners—Canada and Mexico—have rebounded faster than expected in 1996, soaring exports, especially to the United States, have largely fueled their recoveries. Moreover, current indicators suggest that the U.S. trade deficit with those two countries will not improve substantially over the next two years.

Based on fundamentals, the U.S. trade deficit with Mexico should be narrowing. Mexico's domestic demand has begun to escalate recently, thereby strengthening Mexico's demand for U.S. exports which, in addition, are becoming increasingly competitive as Mexican inflation continually outpaces the peso's depreciation. But a downside risk accompanies that outlook: some analysts are concerned that the peso is overvalued and that Mexico may devalue. Although a devaluation would not necessarily hurt Mexico's growth significantly, it could well reduce Mexican demands for U.S. exports.

Canada's recovery is likely to bloom into a more broad-based expansion. The stimulative monetary policies of recent years and a turn to less restrictive fiscal policies are likely to sustain the recent pickup in business investment and, eventually, boost consumer spending and U.S. exports. But that sanguine outcome presumes a recovery in household incomes, a turn in Canada's cycle that remains to be seen.

Europe's recovery is much more subdued than that of North America. High unemployment remains a major drag on European economies. Even though monetary policies across Europe have eased considerably, the fiscal austerity already under way as a prerequisite to the adoption of the European Monetary Union (EMU) at the start of 1999 probably rules out a rapid expansion over the next several years. Over the near term, pallid European growth and a strong dollar are likely to curtail demands for U.S. exports. Of course, the long-run implications of EMU, once it gains credibility, could be positive for U.S. net exports. Recently buoyed by U.S. interest rates that are substantially higher than Japanese and German rates, the dollar will probably weaken (making U.S. goods more competitive in European markets) once the composite currency, the euro, gains credibility. At the same time, Europe's adherence to the Maastricht criteria (which certify membership in the EMU) is likely to enhance Europe's prospects for long-run growth.

Box 1-1. Measuring Fiscal Stance

Because the economy and the budget interact in complex ways, the total budget deficit can give a misleading picture of how the budget affects the economy. To analyze the relation between changes in the budget deficit and changes in GDP and other aggregates, CBO estimates the standardized-employment deficit—a measure that excludes the estimated influences of the business cycle on the budget as well as the effects of identifiable budget items that have virtually no macroeconomic effects.

Cyclical effects are removed because they reflect ways in which the economy affects the budget. Such influences include, for example, increased outlays for unemployment compensation resulting from an increase in the number of insured unemployed or a drop in federal revenues as a result of depressed incomes during a recession. Outlays for deposit insurance and revenues from spectrum auctions are also removed because most of that spending represents only an exchange of assets and because changes in those budgetary flows do not accurately reflect the pattern of effects on total demand. In addition, adjustments for timing are made when there are 11 or 13 monthly payments for various entitlement programs in a fiscal year instead of the usual 12. Those timing adjustments, which in some years are projected to be approximately \$15 billion, help to smooth the pattern of deficits over time and thereby reflect economic effects more accurately. CBO reports as well a second measure—the primary standardized-employment deficit—that also removes interest payments because policymakers can do little to control them over the short run.

Even after those factors have been taken into account, however, the standardized-employment deficit may not accurately portray the stance of fiscal policy. For example, a decline in the standardized deficit might properly be interpreted as fiscal restraint if the decline stems from a drop in, say, purchases of goods and services. An identical decline in the standardized deficit measures stemming from increased levels of national income is not so clearly the result of fiscal restraint because the cyclical adjustment of incomes may or may not be adequate.

Fiscal Policy

The budget deficit dropped sharply in 1996, and any fears that deficit reduction would rattle the economy have been unrealized. The 1996 deficit of \$107 billion was the lowest since that of fiscal year 1981. The dramatic fall in the budget deficit since 1993 reflects the strength of the economy as well as the effects of legislative changes over the past several years. Moreover, the

restraint appears to have run its course—in CBO's baseline projections, the fiscal stance is approximately neutral on average over the next two years.

CBO's estimate of the federal government's overall effect on the economy—the standardized-employment deficit—is a better measure of fiscal stance than is the total budget deficit, although it is certainly subject to a great number of qualifications (see Box 1-1). Even so,

Table 1-2.
Measures of Fiscal Policy Under Baseline Assumptions (By fiscal year)

	Actual				Projected										
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In Billions of Dollars															
Standardized-Employment Deficit ^{a,b}	246	197	199	127	154	133	148	157	166	179	192	209	229	253	283
Primary standardized deficit ^{a,b}	47	-6	-34	-114	-94	-120	-113	-110	-106	-101	-97	-91	-83	-72	-57
Net interest payments	199	203	232	241	248	253	261	267	272	279	289	300	312	325	340
Reconciliation with Budget Deficit:															
Cyclical deficit	37	9	-10	-6	-12	0	5	8	10	10	10	11	11	12	12
Deposit insurance	-28	-8	-18	-8	-12	-4	-3	-1	0	0	-1	-1	-1	-1	-1
Timing of payments	0	4	1	-5	0	0	0	8	-8	0	0	0	14	1	-16
Spectrum auctions	0	0	-8	0	-7	-9	-4	-1	0	0	0	0	0	0	0
Total Budget Deficit ^b	255	203	164	107	124	120	147	171	167	188	202	219	254	266	278
Debt Held by the Public	3,247	3,432	3,603	3,733	3,869	4,009	4,173	4,358	4,539	4,740	4,954	5,184	5,448	5,723	6,011
As a Percentage of Potential GDP															
Standardized-Employment Deficit ^{a,b}	3.7	2.9	2.8	1.7	2.0	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.3
Primary standardized deficit ^{a,b}	0.7	-0.1	-0.5	-1.5	-1.2	-1.5	-1.3	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.6	-0.5
Net interest payments	3.0	3.0	3.2	3.2	3.2	3.1	3.0	3.0	2.9	2.8	2.8	2.8	2.7	2.7	2.7
Reconciliation with Budget Deficit:															
Cyclical deficit	0.6	0.1	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Deposit insurance	-0.4	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Timing of payments	0.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1
Spectrum auctions	0.0	0.0	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Budget Deficit ^b	3.9	3.0	2.3	1.4	1.6	1.5	1.7	1.9	1.8	1.9	1.9	2.0	2.2	2.2	2.2
Debt Held by the Public	49.4	50.1	50.3	49.9	49.5	48.9	48.5	48.3	48.0	47.9	47.8	47.8	48.0	48.2	48.4
Memorandum:															
Potential GDP															
(Billions of dollars)	6,578	6,851	7,166	7,480	7,819	8,199	8,602	9,018	9,450	9,899	10,365	10,847	11,349	11,871	12,416

SOURCE: Congressional Budget Office.

- a. These numbers exclude outlays for deposit insurance and offsetting receipts from spectrum auctions, and reflect adjustments for fiscal years in which there are 11 or 13 monthly payments for various entitlement programs instead of the usual 12.
- b. Budget surpluses are shown as negative deficits.

the decline in that measure over recent years has been sizable, plunging from 3.7 percent of potential GDP in 1993 to 1.7 percent in 1996 (Table 1-2). Although the standardized-employment deficit declined more rapidly in individual years, the drop from 1993 to 1996 is the largest sustained decline in the past four decades (see Figure 1-9). Nearly \$100 billion of the decline in the standardized deficit between 1993 and 1996—or 1.3 percent of potential GDP—represents the cumulative effects of legislation enacted since January 1993. That portion of the overall decline in the standardized deficit unambiguously represents fiscal restraint. The size and duration of that restraint may have contributed to keeping a lid on interest rates during the protracted expansion after the 1990-1991 recession.

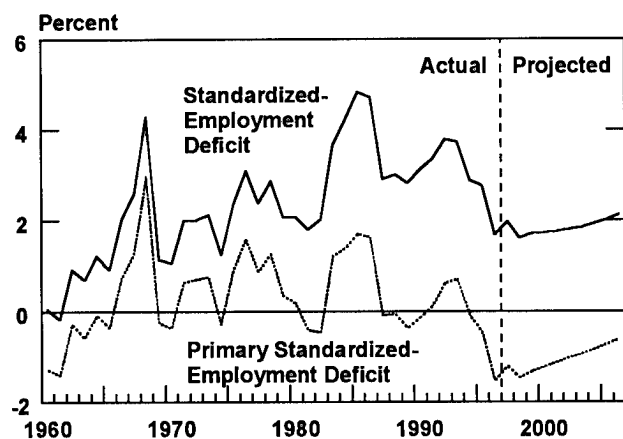
Does the remaining portion of the drop in the standardized deficit represent fiscal restraint? The question arises because of uncertainty about how best to measure overall economic growth in the national income and product accounts for recent years: whether to use the growth reported for production or the growth reported for incomes.

In principle, the sum of all components of economic production should equal the sum of all disbursements of income. In practice, however, those totals dif-

fer, largely because the Bureau of Economic Analysis uses different primary data sources to measure the components of product on the one hand and income on the other. The resulting statistical discrepancy (the difference between the product-side sum and the income-side sum) has been sizable in recent years. More important, between fiscal years 1993 and 1996, the discrepancy has swung from \$63.2 billion (more measured product than income) in fiscal year 1993 to minus \$63.1 billion (more measured income than product) in fiscal year 1996. That large shift is tantamount to a \$126 billion increase in incomes that, for one reason or another, GDP does not reflect (GDP is based on the product side of the accounts).

CBO's cyclical adjustments to revenues cannot capture such an upward swing in incomes relative to GDP. As a result, technical considerations (and not fiscal restraint) may well account for a significant portion of the decline in the standardized deficit over this period. Future revisions to the national income and product accounts should reduce that discrepancy between income and product. If so, estimates of the standardized deficit may eventually reflect more accurately the stance of fiscal policy in recent years. In the meantime, the potential for substantial revisions in the estimates certainly calls for caution in using the standardized deficit to assess the recent stance of fiscal policy.

Figure 1-9.
Measures of the Standardized-Employment Deficit
(By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: The standardized-employment deficit includes interest payments. The primary standardized-employment deficit excludes those payments.

On average through 1998, the outlook for fiscal policy is roughly neutral. As a percentage of potential GDP, the standardized-employment deficit rises from 1.7 percent of potential GDP in fiscal year 1996 to 2.0 percent in fiscal year 1997, but drops back to 1.6 percent in fiscal year 1998. Thereafter, the standardized-employment deficit creeps up slowly to about 2.3 percent by 2007.

Monetary Policy

Anticipating that robust growth in employment and incipient inflationary pressures would force the Federal Reserve to tighten monetary policy, bond markets bid up long-term interest rates throughout the first half of 1996. By June, the rate on 10-year Treasury notes had risen 120 basis points above its level at the end of 1995. But monetary policy held steady. After easing mildly in January 1996 with a cut in the target federal funds rate from 5.5 percent to 5.25 percent, the central

bank made no further adjustments during the year. The rate on three-month Treasury bills remained near 5.1 percent, and by autumn long-term rates began to inch down as the perception of strong growth and higher inflation receded. In the closing months of the year, long-term rates edged up slightly—at year's end, the 10-year Treasury note rate remained below the 6.4 percent average for the year.

The lack of any discernible response in long-term rates to the pleasantly surprising decline in the deficit in 1996 challenges the notion that deficit reduction will sharply reduce interest rates. Instead, market worries about inflation and anticipations of stronger recoveries overseas than have materialized might have offset some part of a decline stemming from the deficit reduction. Moreover, it may also be that markets regarded the 1996 decline in the deficit as temporary. If so, and if expectations about future deficits gradually become more optimistic, long-term rates may drop further over the next two years.

There are few reasons to believe that the central bank will change its policy stance over the near term. Potential increases in the underlying rate of inflation are too uncertain to provoke a more aggressively restrictive monetary stance. Throughout the expansion, growth in the money supply measures has, on average, remained within the range that is believed to be consistent with moderate inflation. Though the monetary indicators M2 and M3 have moved near the high ends of the target ranges set by the Federal Open Market Committee during 1996, those movements appear to reflect a return to more normal behavior—both measures stayed near their lower target ranges during 1992 through 1994.

Moreover, credit markets are not sending alarming signals so far. Although growth in demands for household and business credit has slowed, that is consistent with the more moderate pace of overall economic activity. Relying on robust equity markets and perhaps anticipating a slower pace of capital expenditures, businesses have had less need to issue credit-market debt, particularly since internal funds remain reasonably ample. As a result, the central bank does not seem pressed by financial market imbalances to do very much but maintain its mildly restrictive stance through the near term.

The rapid runup in the stock market may stand as an exception to this otherwise balanced picture, but assessing the movements of stock prices and their role in formulating monetary policy is almost always difficult. Since early 1995, the stock market has been spiraling upward, propelled by rising corporate profits, declining interest rates, and the prospect of a relatively stable economic environment for the foreseeable future. But whether or not the current overall value of equities is "too high" is impossible to determine. Such an assessment requires judgments about the outlook for each of those fundamentals, and such judgments can differ widely among participants in financial markets. The level of equity prices that prevails represents a consensus of those judgments—a consensus that lurches along with shifts in the distribution of moods among investors. Monetary authorities can influence those moods by manipulating interest rates, margin requirements, and credit controls, or by directly appealing to participants. But those instruments are too blunt to be used with even rough precision.

The Economic Outlook

Economic indicators at the start of 1997 suggest that the economy is likely to grow at a moderate pace through the end of 1998, under current budgetary policies (see Chapter 4 for how significant changes in those policies could affect the economic outlook). The moderation in demand is largely the result of a slowing in the growth of business expenditures for capital equipment. With moderate real growth, inflation should be held in check. Interest rates are expected to change little over the forecast horizon, reflecting the relatively stable outlook for inflation and the assumption that the central bank is not likely to alter its current policy stance substantially over the next two years.

In projecting economic conditions beyond 1998, CBO does not attempt to estimate cyclical movements of the economy. Rather, the projections are designed to approximate the level of economic activity on average, including the possibility of above- or below-average rates of growth, inflation, and interest. CBO uses historical relationships to identify and project those trends in such fundamental factors determining economic growth over the long term as growth in the labor force,

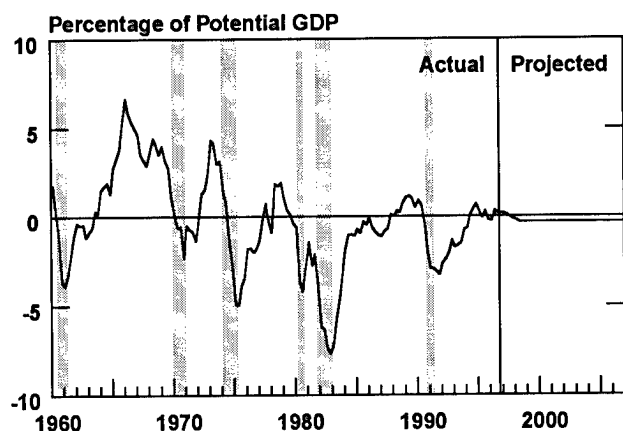
the rate of national saving, and growth in productivity (see Chapter 3 for alternative economic projections).

The Forecast Through 1998

CBO expects the economy to continue growing moderately over the next two years, a pattern that closely resembles a consensus of forecasts. In 1997 and 1998, inflation in consumer prices and interest rates are not likely to change from the currently prevailing rates, though the unemployment rate should rise somewhat by the end of 1998.

Output. In 1997 and 1998, growth in real GDP is expected to match its pace of the previous two years. Averaging 2.2 percent growth over the next two years, real output will, for a time, fall short of the 2.3 percent average growth estimated for potential output over that period. As a result, demand pressures are likely to ease somewhat. The excess of growth of potential over actual output is assumed to widen steadily until the end of 1988 when the forecast assumes that the average historical difference between the levels of potential and actual GDP will prevail (Figure 1-10).

Figure 1-10.
The GDP Gap: GDP Versus Potential GDP



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: The GDP gap is GDP minus potential GDP expressed as a percentage of potential GDP. Historically, expansions typically overshoot the mark so that GDP eventually exceeds potential GDP. The actions of the Federal Reserve Board influence that outcome.

Although the anticipated pace of overall growth during the next two years is the same as that of the last two, CBO does anticipate some shifts in the major components of demand. Private consumption is expected to grow in line with incomes and, given current-policy assumptions, federal as well as state and local government purchases will accelerate somewhat. The components of demand that are expected to hamper GDP growth over the next two years relative to the last two years are net exports, housing and, most important, producers' durable equipment. Expenditures on producers' durable equipment are expected to grow at rates markedly below the double-digit pace of recent years, though still considerably higher than the other major components of demand.

Inflation and Unemployment. Although growth in employment is anticipated to remain solid, growth of the labor force will exceed growth in employment. As a result, the unemployment rate is forecast to drift upward over the next two years from the 5.3 percent rate prevailing now to about 5.7 percent. CBO expects the underlying rate of inflation to rise somewhat over the forecast period. However, little change is evident in the overall measure of CPI inflation.

The expected increase in the underlying rate of CPI inflation is the net result of several opposing tendencies. CBO believes that the recent slowdown in medical prices and decline in nonpetroleum import prices are temporary. Similarly, CBO assumes that the unusually sharp declines in computer prices will end soon, and computer prices will fall more gently through the near term. In addition, the increase in the minimum wage—phased in between October 1996 and September 1997—may raise compensation slightly, but the effects on overall inflation are likely to be tiny and, in any event, fleeting. Finally, some upward pressure on inflation is carried over with a lag from the recent period in which the unemployment rate was below the NAIRU. In contrast, the CPI measure of inflation will be depressed slightly by a change in the procedure for measuring price changes for hospital care and, more important, the 1998 rebenchmarking.

On balance, overall inflation measured by the CPI will remain unchanged over the near term. However, inflation measured by the price index for GDP is expected to accelerate somewhat between now and 1998. Differences between CPI inflation and growth in the

price index for GDP affect budget forecasts. Indexed budget programs and personal income tax brackets are tied to CPI inflation, whereas overall incomes (and thereby revenues) are most directly influenced by growth in the GDP price index. As a result, for a given rate of inflation in the GDP price index, a rise in the forecast for CPI inflation implies a higher deficit projection. Over the 1986-1995 period, inflation in the CPI exceeded growth in the GDP price index by an average 0.4 percentage points. Recently, however, that wedge has widened: between the third quarter of 1995 and the third quarter of 1996, CPI inflation topped that in the GDP price index by 0.8 of a percentage point.

CBO expects the factors contributing to this widening of the wedge to be largely temporary. Major factors in the widening are the slowing of inflation in medical care and the accelerated deflation in computer prices, both of which are unlikely to be sustained over the long run. With those temporary factors out of the picture, the wedge should contract to about 0.4 or 0.5 percentage points over the next two years.

Interest Rates. CBO assumes that the Federal Reserve will maintain its current target for the federal funds rate through the forecast horizon. As a result, short-term rates are expected to hover close to their current levels—for example, the three-month Treasury bill rate is forecast to average 5 percent in 1997 and 1998, the same rate as in 1996. Long-term interest rates will follow suit—CBO expects little change from the prevailing 6.3 percent through 1998.

Comparison with Private Forecasts. CBO's current forecast is very close to the *Blue Chip* consensus average of forecasts (see Table 1-3). The *Blue Chip* forecast is based on a survey of approximately 50 private-sector economists—as a result, it represents a wide range of views about the outlook. Although the two-year average forecasts of CBO and the *Blue Chip* for nominal GDP and CPI inflation are virtually indistinguishable, the consensus forecasts for real growth and the unemployment rate are somewhat weaker than CBO's. Indeed, more than 60 percent of the respondents to a recent *Blue Chip* survey expect a recession before the end of 1998.²

The Projections Through 2007

CBO projects that annual growth in real GDP will average 2 percent over the 1999-2007 period, mirroring the pace of growth in potential output. Over this same period, the unemployment rate is projected to rise to

Table 1-3.
Comparison of CBO and *Blue Chip* Forecasts for 1997 and 1998 (In percent)

	Estimate 1996 ^a	Forecast	
		1997	1998
Growth of Nominal GDP			
CBO	4.4	4.6	4.6
<i>Blue Chip</i>	4.4	4.6	4.6
Growth of Real GDP			
CBO	2.3	2.3	2.0
<i>Blue Chip</i>	2.3	2.3	2.1
Growth of GDP Price Index			
CBO	2.1	2.3	2.5
<i>Blue Chip</i>	2.1	2.4	2.5
Growth of CPI-U ^b			
CBO	2.9	2.9	2.9
<i>Blue Chip</i>	2.9	2.9	3.0
Unemployment Rate			
CBO	5.4	5.3	5.6
<i>Blue Chip</i>	5.4	5.4	5.5
Three-Month Treasury Bill Rate			
CBO	5.0	5.0	5.0
<i>Blue Chip</i>	5.1	5.2	5.1
Ten-Year Treasury Note Rate			
CBO	6.4	6.2	6.2
<i>Blue Chip</i>	6.4	6.4	6.4

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (January 10, 1997).

a. Incorporates data for the first three quarters of 1996 published November 27, 1996.

b. CPI-U is the consumer price index for all urban consumers.

2. Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (September 10, 1996), p. 10.

Table 1-4.
Accounting for Growth in Real GDP (Average annual rate of growth, in percent)

	Actual					Projected	
	1960 to 1996	1960 to 1973	1973 to 1981	1981 to 1990	1990 to 1996	1996 to 2002	2002 to 2007
Civilian Labor Force	1.8	1.9	2.5	1.6	1.0	1.1	1.0
Plus Civilian Employment Rate	0	0.1	-0.4	0.2	0	-0.1	0
Equals Civilian Employment	1.8	2.0	2.1	1.9	1.1	1.0	1.0
Plus Nonfarm Hours per Civilian Employee	0	0.2	-0.4	0.1	0.5	0.2	0.1
Equals Total Hours (Nonfarm business)	1.9	2.2	1.7	1.9	1.5	1.2	1.0
Plus Output per Hour (Nonfarm business)	1.5	2.5	0.7	1.2	0.7	1.2	1.1
Equals Nonfarm Business Output	3.4	4.7	2.4	3.2	2.2	2.4	2.2
Minus Nonfarm Business Output Share of GDP	0.2	0.4	-0.1	0.2	0.3	0.2	0.2
Equals Real GDP	3.1	4.3	2.4	3.0	2.0	2.1	2.0
Plus Ratio of Potential to Actual GDP ^a	0	-0.3	-0.8	-0.3	-0.1	0.1	0
Equals Potential GDP ^a	3.1	3.9	3.2	2.7	1.9	2.2	2.0

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics.

NOTE: The years marking the ends of the historical intervals are years in which the business cycle peaked. The indicated arithmetical relationships may not hold exactly because of rounding.

a. Estimated by CBO.

6 percent, and inflation measured by the CPI-U stays close to 3 percent.

Projections for Growth. CBO projects growth in real GDP after 1998 will match that of potential output, which works out to an average 2.1 percent rate of growth from 1996 through 2007 (see Tables 1-4 and 1-5). That pace is considerably slower than growth in the past—indeed, slower than even the 3 percent average rate of growth posted from 1981 through 1990.

Slower growth of the labor force from the pace of the last decade accounts for virtually all of the projected reduction in the rate of growth of output compared with the 1980s. The civilian labor force is assumed to grow

at an average annual rate of 1 percent over the years from 1996 through 2007, down from the 1.6 percent average rate it posted from 1981 to 1990. CBO adopts an assumed path for labor supply that is between the midrange projections made by BLS and those made by the Social Security Administration.³ By contrast, CBO's projection assumes that labor productivity will average about 1.2 percent growth, very close to the advance posted in the 1980s.

3. Fullerton, Howard W., "The 2005 Labor Force: Growing, But Slowly," *Monthly Labor Review*, vol. 118, no.11 (November 1995), pp. 29-44; Social Security Administration, *1996 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors' Insurance and Disability Insurance Trust Funds* (June 1996).

Table 1-5.
Economic Projections for Fiscal Years 1997 Through 2007

	Actual 1996 ^a	Forecast		Projected								
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Nominal GDP (Billions of dollars)	7,484	7,829	8,182	8,576	8,991	9,421	9,870	10,334	10,815	11,315	11,835	12,379
Nominal GDP (Percentage change)	4.1	4.6	4.5	4.8	4.8	4.8	4.8	4.7	4.6	4.6	4.6	4.6
Real GDP (Percentage change)	2.0	2.4	2.0	2.2	2.2	2.1	2.1	2.0	2.0	2.0	1.9	1.9
GDP Price Index (Percentage change)	2.2	2.2	2.4	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
CPI-U ^b (Percentage change)	2.8	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1
Unemployment Rate (Percent)	5.5	5.3	5.5	5.8	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.1	5.0	5.0	4.9	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Ten-Year Treasury Note Rate (Percent)	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Tax Bases (Billions of dollars)												
Corporate profits	642	650	678	690	703	722	744	772	806	841	878	921
Wage and salary disbursements	3,577	3,762	3,910	4,081	4,267	4,462	4,667	4,880	5,102	5,333	5,575	5,828
Other taxable income	1,592	1,672	1,753	1,855	1,960	2,061	2,160	2,260	2,362	2,468	2,578	2,692
Tax Bases (Percentage of GDP)												
Corporate profits	8.6	8.3	8.3	8.0	7.8	7.7	7.5	7.5	7.5	7.4	7.4	7.4
Wage and salary disbursements	47.8	48.1	47.8	47.6	47.5	47.4	47.3	47.2	47.2	47.1	47.1	47.1
Other taxable income	21.3	21.4	21.4	21.6	21.8	21.9	21.9	21.9	21.8	21.8	21.8	21.7

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Reflects data in the national income and product accounts published on November 27, 1996.

b. CPI-U is the consumer price index for all urban consumers.

CBO projects that growth in potential output will slow somewhat throughout the projection period.⁴ Between 1996 and 2002, potential GDP is expected to

grow an average 2.2 percent a year, slowing to a projected 2 percent annual rate over the 2002-2007 period. That shift stems from two factors: (1) a slowing in the capital stock that reflects the winding down of the recent investment boom, and (2) a tempering of growth of the labor force in the second half of the projection period. The slower growth of capital shows up as a slight reduction in the rate of growth of labor productivity, which is projected to average 1.2 percent a year be-

4. This description differs slightly from the presentation of the projection made in past years. In the past, CBO has applied the average rate of potential growth over the entire projection interval to each of the years within it. Interpreting year-to-year growth is easier under the new procedure than under the old.

tween 1996 and 2002 and 1.1 percent during the 2002-2007 period.

Projections for Unemployment and Inflation. CBO projects that the unemployment rate will average 6 percent after the year 2000—a projection that is consistent with a stable inflation rate if one includes price shocks similar to those that occurred over the past 35 years. The projection assumes that the NAIRU remains at 5.8 percent and that the average historical gap between the civilian unemployment rate and the NAIRU of about 0.2 percentage points is also maintained throughout the projection period. That assumption incorporates the average historical tendency for the economy to experience sporadic upward price shocks. Such upward price shocks are assumed to have little permanent effect on the deficit projection—all other things being equal, increases in overall inflation tend to raise revenues and expenditures by about the same magnitude over the long term (see Appendix D).

CBO projects that inflation measured by the CPI will average about 3 percent from 1998 through 2007 and the GDP price index will advance at an average rate of 2.6 percent.

Projections for Interest Rates. The CBO projection assumes that real (inflation-adjusted) interest rates will drop below the levels that prevailed during the preceding decade. By 2007, real short-term rates are projected to drop to 1.5 percent and long-term rates to 3.1 percent. Those projections are about 20 basis points below CBO's May 1996 projection, the lower rates stemming largely from the 1996 drop in the deficit. That drop implies that about one-third of the decline that CBO believed last May was necessary to balance the budget by 2002 has already occurred.

Projections for Income Shares. CBO's projection calls for a gradual decline between 1998 and 2007 in the overall share of GDP that falls in the main taxable categories—the share declines by about a percentage point to 76.3 percent of GDP in 2007. Although that percentage is below that of recent years, the projection for 2007 is close to the average share for the 1970-1996 period. Part of the decline in the share stems from the narrower discrepancy between the income side of the accounts and the product side of the accounts discussed earlier. But projected changes in the growth in the portion of labor compensation that is paid in the form of nontaxable benefits account for the bulk of the decline in the taxable share.

The nontaxable benefit share of GDP increases from 5.8 percent of GDP in 1998 to 6.2 percent in 2007. Nontaxable benefits include employer contributions to health and life insurance, pension contributions, and unemployment compensation. The projected increase in the share is faster than recorded for the past four years, but slower than the average of the past 25 years.

Growing business interest payments will shift business income from corporate profits to the "other taxable income" category. A much larger proportion of recipients of interest income than of recipients of corporate profits are untaxed (for example, pension funds), so the shift affects projected revenues. Interest payments are projected to rise as a share of GDP because corporations are currently paying an unusually small percentage of their cash flow out as interest. If corporations gradually increase their debt to reflect a pattern that is more like the average of the last 25 years, interest payments as a share of GDP will rise.

The Budget Outlook

Compared with the Congressional Budget Office's (CBO's) previous deficit projections, the current outlook for the budget shows considerable improvement. Although CBO calculates that the deficit will increase in 1997 after four consecutive years of decline, projections for 1997 and future years have dropped markedly from the May 1996 *Economic and Budget Outlook*. Nevertheless, in the absence of further policies to reduce spending or increase revenues, the deficit will begin to grow.

Under current taxing and spending policies and CBO's assumptions about the economy, the deficit will rise from \$124 billion this year to \$188 billion in 2002 and \$278 billion in 2007, the last year of the projection period. As a percentage of gross domestic product (GDP), the deficit will gradually climb from 1.6 percent in 1997 to 2.2 percent by 2007. Those projections assume that discretionary spending is restrained by the statutory caps through 1998 and then grows at the rate of inflation thereafter.

The reduction in CBO's deficit estimates stems from a variety of sources. The impact on the budget of legislation enacted since last May has been relatively small, with the significant exception of welfare reform. By 2002, changes in family support and other assistance programs are estimated to reduce federal outlays by \$13 billion. The healthy economy has also contributed to an improved outlook boosting revenues (particularly in the near term) and lowering interest payments. The largest change, however, is in CBO's projections of growth in federal health care programs. Recent declines in the rate of growth in Medicare and

Medicaid have led CBO to reduce projected outlays for the two programs by \$31 billion in 2002. All told, CBO has lowered its projection of the deficit in 2002 under current policies from \$285 billion (in May 1996) to \$188 billion in this report.

Budget projections are highly uncertain, and over a 10-year period they are particularly sensitive to the performance of the economy and unexpected changes in the growth of entitlement spending. Although CBO believes that its assumptions are reasonable and analytically sound, minor changes can have a significant effect on deficit estimates. Chapter 3 provides a discussion of the ways in which alternative economic assumptions and other factors could affect future deficit projections.

CBO's new baseline represents the outlook for federal revenues, outlays, and the deficit if current taxing and spending policies remain unchanged. It is not a forecast of budget outcomes, but it is useful for sketching the consequences of today's policies and serves as a benchmark for weighing proposed changes. Legislative changes that reduce the budget deficit would substantially lower interest rates and bring slightly higher growth than under the baseline scenario, thereby producing a fiscal dividend. Chapter 4 presents CBO's estimates of the fiscal dividend that would result from a deficit reduction path leading to a balanced budget in 2002 as well as the deficits that would remain to be eliminated. Those estimates show how much taxing and spending policies must be changed to achieve budgetary balance.

The Deficit Outlook

The simplest and most widely used measure of the deficit is the gap between total federal revenues and outlays. Nevertheless, there are two alternative gauges: one that omits the cyclical effects of the economy on the budget and one that excludes spending and revenues that have been designated by law as off-budget.

The Total Deficit

Last year's total deficit was \$107 billion, the lowest recorded since 1981. If today's policies remain unchanged, CBO expects that the total deficit will rise to \$124 billion in 1997 and remain at about that level in 1998 (see Table 2-1). What happens after that depends on what is assumed about discretionary spending—the label given to funds that are controlled by annual ap-

Table 2-1.
CBO Deficit Projections (By fiscal year)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In Billions of Dollars												
Baseline Total Deficit												
Discretionary spending grows with inflation after 1998												
Revenues	1,453	1,507	1,567	1,634	1,705	1,781	1,860	1,943	2,033	2,127	2,227	2,333
Outlays	1,560	1,632	1,687	1,781	1,877	1,948	2,049	2,145	2,252	2,381	2,492	2,611
Deficit	107	124	120	147	171	167	188	202	219	254	266	278
Discretionary spending is frozen at the level of the 1998 cap												
Revenues	1,453	1,507	1,567	1,634	1,705	1,781	1,860	1,943	2,033	2,127	2,227	2,333
Outlays	1,560	1,632	1,687	1,761	1,839	1,883	1,962	2,033	2,114	2,216	2,294	2,376
Deficit	107	124	120	128	134	102	101	89	81	89	67	44
On -Budget Deficit ^a	174	201	199	237	267	266	291	311	333	374	392	410
MEMORANDUM:												
Off-Budget Surplus												
Social Security	66	78	81	88	94	98	104	109	114	120	127	132
Postal Service	<u>1</u>	<u>-1</u>	<u>-2</u>	<u>2</u>	<u>1</u>	<u>b</u>	<u>-1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total, Off-Budget Surplus	67	77	79	90	96	99	103	109	114	120	127	132
As a Percentage of GDP												
Baseline Total Deficit												
Discretionary spending grows with inflation after 1998	1.4	1.6	1.5	1.7	1.9	1.8	1.9	2.0	2.0	2.2	2.2	2.2
Discretionary spending is frozen at the 1997 dollar level	1.4	1.6	1.5	1.5	1.5	1.1	1.0	0.9	0.7	0.8	0.6	0.4

SOURCE: Congressional Budget Office.

a. Excludes Social Security and Postal Service. Assumes that discretionary spending grows with inflation after 1998.

b. Less than \$500 million.

propriations actions. That particular one-third of federal outlays is governed through 1998 by overall caps.

The caps, which expire in 1998, were originally established by the Budget Enforcement Act of 1990 for a five-year period and were extended for another three years by the Omnibus Budget Reconciliation Act of 1993. Since 1991, spending from the 13 regular appropriation bills and any supplemental appropriations have been capped. Since 1995, separate caps have applied to general-purpose spending and to spending from the Violent Crime Reduction Trust Fund (VCRTF). (All discretionary spending, except that from the VCRTF, is considered general-purpose.) In general, the caps have imposed a near freeze on nominal discretionary outlays for the 1991-1996 period.

Once the caps expire, however, there will be no overarching dollar total for discretionary appropriations set in law. Unlike mandatory spending and revenues, which are governed by permanent laws, discretionary spending is subject to annual appropriations. The concept of current policy for discretionary spending is therefore ambiguous. Yet a benchmark must be provided for weighing decisions about future appropriations. One such benchmark is the maintenance of real funding—that is, current resource levels adjusted for inflation. An alternative is to fix the benchmark at a constant nominal (or dollar) level, which is the course that the Congress and the President have essentially chosen from 1991 through 1998. CBO therefore assumes two alternative paths for discretionary spending: one that adjusts for inflation but is subject to the existing caps on discretionary spending, and one that is frozen at nominal 1997 levels (adjusting for the cap in 1998) throughout the next 10 years.

If discretionary spending keeps pace with inflation when the caps expire next year, CBO projects that the deficit will rise to \$188 billion in 2002. Projecting further into the future, by 2007 the deficit would more than double its current size, reaching a level of \$278 billion. If discretionary spending is held constant in nominal dollars, the deficit would gradually decline to \$44 billion in 2007. Holding discretionary outlays to their 1997 levels would have a severe impact on programs and activities, representing a loss in purchasing power of 26 percent by the end of the projection period.

The baseline total deficit path (with growth in discretionary spending after 1998) does not grow smoothly over the projection period, mostly as a result of calendar quirks. Currently, if the first day of the month falls on a weekend or a federal holiday, payments for military salaries, veterans' benefits, Supplemental Security Income (SSI), and Medicare health maintenance organizations (HMOs) are pushed into the preceding month. When that happens to payments due on October 1—the beginning of the federal government's fiscal year—billions of dollars in outlays can be shifted to the preceding year. That phenomenon has not been much of an issue in previous years but because enrollment of Medicare beneficiaries in HMOs has increased, by 2000 the timing shift will total \$8 billion (the baseline does not include the shift in payments for military salaries because they are lumped in with overall discretionary spending). Because the underlying growth in the deficit is relatively slow, shifting that \$8 billion forward from 2001 to 2000 contributes to a drop of \$4 billion in the unified deficit between the two years. A similar shift in payments occurs when benefits from 2006 shift into 2005 and benefits from 2007 shift into 2006, producing a pattern of 13, 12, and 11 payments a year, respectively.

Alternative Measures of the Deficit

Although the total deficit is the most common measure of the deficit, analysts often cite two other measures of the amount by which the government's spending exceeds its revenues. One measure removes cyclical factors from the deficit calculation and the other removes spending and receipts designated by law as off-budget.

Temporary and cyclical economic factors can obscure fundamental trends in the budget. For example, high unemployment automatically exaggerates the size of the deficit—principally because lower revenues are accompanied by higher outlays for unemployment compensation and other programs. Moreover, some government transactions, such as deposit insurance and receipts from Federal Communications Commission auctions of the electromagnetic spectrum, merely represent an exchange of assets and have no discernable effects on the economy. When calculating the standardized-employment deficit, those factors are

stripped away and the underlying trends in the deficit become more apparent. Although current projections show only a small difference between the total deficit and the standardized-employment deficit, they do shed some light on deficit fluctuations in recent years.

In the late 1980s and early 1990s, large outlays for deposit insurance contributed to ballooning deficits. The early 1990s also witnessed a recession, causing federal revenues to decline and spending to increase. Thus, making good on the government's guarantee to savings and loan depositors and the transitory effects of the business cycle bloated the record-high deficits posted in the early 1990s (see Figure 2-1). The subsequent improvement over the past four years, therefore, is somewhat less dramatic than it may at first appear.

The massive losses associated with closing failed savings and loan institutions have now subsided and the continuing sales of assets, along with other receipts such as premiums paid by insured institutions, dominate the deposit insurance totals. Also, cyclical effects that were pronounced when the economy was weak have faded now as the economy has become healthier. (See Chapter 1 for more information about the standardized-employment deficit.)

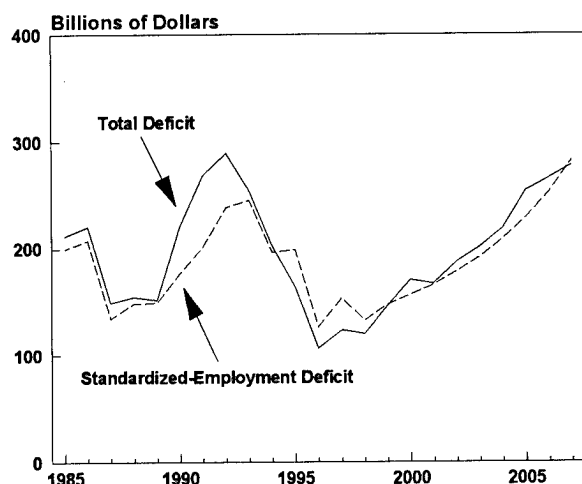
The on-budget deficit is rooted in legislation that granted special, off-budget status to particular programs run by the government. The two Social Secu-

rity trust funds—Old-Age and Survivors Insurance and Disability Insurance—were granted off-budget status in the Balanced Budget and Emergency Deficit Control Act of 1985. Legislation enacted in 1989 excluded the much smaller net outlays of the Postal Service from on-budget totals.

The fiscal picture looks noticeably different if off-budget programs are excluded (see Table 2-1). In isolation, Social Security runs a surplus; its income from the taxes paid by workers and their employers, interest, and a few other sources exceeds its outlays for administrative costs and benefits to retired and disabled workers, their families, and their survivors. The majority of that surplus stems not from its excess of taxes over benefits, but from interest on its holdings of Treasury securities. Removing Social Security from the on-budget totals makes the remaining deficit greater.

Social Security's benefits alone account for more than one-fifth of federal spending, and its payroll taxes account for about one-fourth of government revenues. When economists, credit market participants, and policymakers seek to gauge the government's role in the economy and its drain on the credit markets, they should look at the total figures and not ignore this huge program.

Figure 2-1.
The Federal Deficit (By fiscal year)



SOURCE: Congressional Budget Office.

Changes in the Budget Outlook Since May

The budget outlook now looks much better than it did when CBO published its projections in May 1996. Projected deficits are down in each year by \$47 billion in 1997, \$97 billion in 2002, and \$138 billion in 2006. With few legislative changes aside from welfare reform enacted since CBO's May 1996 projections and relatively small alterations in CBO's economic forecast, much of the reduction in the deficit estimates can be attributed to technical factors.

Revisiting 1996

Last May, CBO projected a 1996 deficit of \$144 billion. In August, CBO reduced its estimate of the 1996 deficit to \$116 billion. Two months later, the Treasury Department reported that the actual deficit totaled \$107

billion. The substantial improvement in 1996 reflects a trend that CBO believes will carry through the projection period: higher revenues and slower growth in outlays for mandatory programs, particularly Medicare and Medicaid, contributing to a decline in deficit estimates.

CBO's August 1996 report presented only budget estimates for 1996. At that time it was already recognized that revenues were going to be higher than projected in May and that spending would be lower. The August estimates incorporated a \$22 billion increase in revenues, partly because of higher personal income and corporate profits in 1996, but also because of approximately \$15 billion in higher-than-expected individual income tax payments made in April for 1995 liabilities. The reasons for the April increase are still not fully understood, though. Further contributing to the improved outlook in August was a nearly \$7 billion decrease in projected outlays. All told, CBO reduced its estimate of the deficit by \$28 billion.

As it happened, the deficit came down even further from the August estimate. Total discretionary spending ended up at \$533 billion, exactly where CBO projected it would be in its May outlook. Revenues as reported in the final statement from the Department of the Treasury were up another \$3 billion from CBO's August estimate (again caused by higher personal incomes and corporate profits) and outlays declined an additional \$6 billion—more than half of which came from Medicare. The above-mentioned changes brought the final 1996 deficit in at \$107 billion.

Revisions in the 1997-2007 Projections

CBO traces its revisions of the budget outlook since May to three factors: newly enacted legislation, changes in the economic outlook, and other, so-called technical factors. The details that follow apply to the projections assuming that discretionary spending grows with inflation up to the level of the caps.

Recent Legislation. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, otherwise known as welfare reform, had the greatest budgetary impact of any piece of legislation passed by the 104th Congress. That act replaced federal payments under several entitlement programs among them, Aid to Families with Dependent Children and the Job Oppor-

tunities and Basic Skills program with block grants to states. Additionally, the legislation restricted the eligibility of legal aliens for welfare benefits, modified the benefits and eligibility requirements in the Food Stamp and Child Nutrition programs, changed the operation and financing of the federal and state child support enforcement system, increased funding for child care programs, and tightened the eligibility requirements for disabled children under the Supplemental Security Income program.

Overall, from 1997 through 2002, welfare reform is expected to reduce the deficit by \$55 billion and annual savings will rise from \$3 billion this year to \$13 billion in 2002 (see Table 2-2). Most of the savings are attributable to changes in the SSI and Food Stamp programs, both of which will be reduced by an estimated \$5 billion in 2002. SSI outlays will be reduced by imposing tighter eligibility criteria for children seeking disability benefits and by limiting the eligibility of legal aliens. The new law imposes the same curbs on Food Stamp payments to legal aliens as on SSI. Aliens will not receive benefits from either program unless they fall into one of the exempted groups chiefly refugees who have been in this country for less than five years or aliens who have substantial work experience (defined as 40 quarters) in the United States. Food Stamp outlays will be reduced by a variety of other provisions in the legislation, including an adjustment to the maximum benefit level and the imposition of work requirements for able-bodied individuals.

Apart from welfare reform, the Congress has enacted little legislation since May that has long-term budgetary impact. Legislative language included in 1997 appropriation bills will reduce outlays this year by nearly \$7 billion, mostly through one-time increases in mandatory receipts. Recapitalizing deposit insurance agencies and authorizing additional auctions of the electromagnetic spectrum enabled the Congress to increase budget authority for discretionary programs by \$12 billion in 1997. Other legislative changes are mostly composed of interest savings attributable to welfare reform and the aforementioned receipts.

Economic Changes. As discussed in Chapter 1, CBO's economic forecast is not much different than it was in May. But even the relatively small changes in the forecast have the effect of reducing projected deficits by an average of nearly \$25 billion per year over

the 1997-2006 period. Although nominal GDP is slightly lower, CBO's new economic projections show corporate profits and wage and salary disbursements representing a larger share of GDP, thereby pushing the tax base higher over the next few years and boosting revenues, albeit by a declining amount. Because of that economic difference, revenues are expected to be \$23 billion higher this year and \$9 billion greater in 2002.

On the outlay side, the major economic difference is in net interest. CBO's forecast of short-term interest rates is slightly higher in 1997 and 1998, but in later years both short- and long-term rates will be 0.2 percentage points lower than the previous forecast. Interest payments, therefore, will be \$5 billion higher in 1997 because of economic factors, but \$24 billion lower by 2006. Small reductions in estimates of the

Table 2-2.
Changes in CBO Deficit Projections (By fiscal year, in billions of dollars)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
May 1996 Baseline Deficit	144	171	194	219	244	259	285	311	342	376	403
Legislative Changes											
Revenues	a	-1	a	a	-1	a	a	-1	-1	a	-1
Outlays											
Discretionary	2	-2	1	1	2	2	2	2	2	2	2
Welfare reform ^b	n.a.	-3	-8	-9	-10	-11	-13	-14	-15	-17	-18
Other	-1	-8	-1	-2	-3	-4	-6	-7	-8	-9	-11
Subtotal	1	-13	-8	-10	-12	-13	-17	-19	-21	-25	-27
Deficit	1	-14	-8	-11	-12	-13	-17	-19	-22	-25	-28
Economic Changes											
Revenues	-20	-23	-19	-17	-15	-12	-9	-5	-1	5	11
Outlays											
Net interest	a	5	1	-2	-7	-12	-15	-17	-20	-22	-24
Other outlays	-1	-2	-6	-6	-5	-4	-4	-4	-5	-5	-4
Subtotal	-1	4	-5	-8	-12	-16	-19	-22	-25	-27	-28
Deficit	-21	-20	-24	-25	-27	-28	-28	-27	-25	-22	-17
Technical Changes											
Revenues	-5	a	-5	-7	-9	-11	-11	-7	-9	-8	-5
Outlays											
Medicaid and Medicare	-9	-13	-17	-18	-17	-31	-31	-37	-44	-42	-59
Other major benefit programs	-1	-2	-2	-1	-2	-3	-4	-5	-5	-4	-3
Deposit insurance	1	-4	-3	-2	a	1	1	a	a	a	-1
Net interest	1	-2	-5	-5	-7	-10	-13	-17	-20	-24	-28
All other	-5	8	-11	-2	1	4	6	2	2	3	2
Subtotal	-12	-13	-38	-29	-25	-40	-41	-57	-67	-68	-88
Deficit	-17	-13	-42	-36	-34	-50	-52	-63	-76	-75	-93
Total Changes	-37	-47	-74	-72	-73	-92	-97	-109	-123	-122	-138
January 1997 Baseline Deficit	107	124	120	147	171	167	188	202	219	254	266

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Less than \$500 million.

b. Includes effects of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996.

consumer price index for all urban consumers and of the unemployment rate reduce outlays by a few billion dollars in each year compared with the May 1996 estimates.

Technical Reestimates. Technical revisions are defined as any changes that are not ascribed to legislation or changes in the macroeconomic forecast. Such revisions account for the majority of the post-1997 improvement in CBO's deficit outlook.

By far, the largest technical reestimates have occurred in the two major health care programs, Medicare and Medicaid. Projected outlays for the two programs combined have been reduced by \$31 billion in 2002 from CBO's previous estimates, with larger reductions occurring in later years.

In 2002, for technical reasons, estimated Medicaid spending is expected to be nearly \$20 billion lower than that reported in May 1996. About one-third of that reduction can be attributed to a lower starting point for the projections; Medicaid outlays in 1996 were almost \$4 billion lower than previously anticipated. In addition, CBO has lowered its forecast of the average annual rate of growth in spending between 1997 and 2002 from nearly 10 percent to about 8 percent.

CBO's current Medicare projections also reflect lower 1996 outlays than previously expected and a reduction in the rate of growth of spending. Spending growth for Medicare Part A—the Hospital Insurance (HI) program—is essentially unchanged from CBO's May outlook, but outlays are lower in each year because the 1996 total was \$2 billion lower than anticipated. Nevertheless, CBO continues to project that the HI Trust Fund will be exhausted in 2001. CBO's current projection of spending growth for Medicare Part B Supplementary Medical Insurance is about 1 percentage point a year below the May 1996 projection, largely because of slower growth in spending for physicians' services. In total, Medicare outlays have been reduced by \$11 billion in 2002 because of technical reestimates (see Appendix G for more details on CBO's projections for Medicare).

Also of consequence is the reduction in net interest payments generated by the technical changes in CBO's projections. Decreased deficits attributable to technical changes translate into lower projections of accumulated

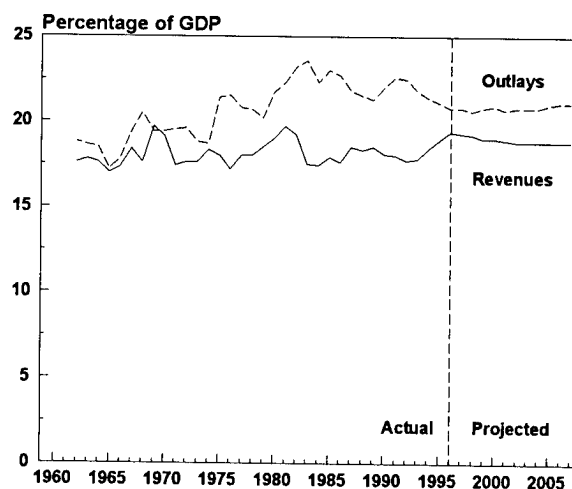
debt and therefore lower debt service charges. Technical changes are expected to reduce interest payments by \$13 billion in 2002 and \$28 billion in 2007, mostly caused by the expected decrease in borrowing needs.

Other technical changes are minor when compared with the changes in Medicare, Medicaid, and net interest. A shift in the timing and amount of receipts from electromagnetic spectrum auctions from 1997 to 1998 is expected to reduce offsetting receipts (recorded in the budget as a credit against outlays) by \$8 billion in 1997 and increase receipts by \$6 billion in 1998 and \$3 billion in 1999. Spending for deposit insurance programs has been lowered from 1997 through 1999 because of a reduction in projected losses to be covered by the Bank Insurance Fund and Savings Association Insurance Fund.

The Revenue Outlook

Federal revenues are expected to be \$1.5 trillion, or 19.3 percent of GDP, in 1997. They are projected to grow less rapidly than the economy in the next five years, slipping to 18.8 percent of GDP by 2002, and then are expected to keep pace with GDP (see Table 2-3 and Figure 2-2).

Figure 2-2.
Outlays and Revenues as a Percentage of GDP
(By fiscal year)



SOURCE: Congressional Budget Office.

It is anticipated that in relation to GDP, revenues will be higher than the levels typical of the past three decades. In 1960 through 1996, revenues averaged 18 percent of GDP. Before last year, they had reached or exceeded 19 percent in only five years and those years were unusual for one reason or another. In 1969 and 1970, taxes were raised to help finance the Vietnam War, and in 1980 through 1982—before the Reagan Administration's tax cut and the subsequent indexing of tax brackets to the price level—rapid inflation pushed up revenues.

The relative stability of the ratio of revenue to GDP cloaks some striking shifts in composition (see Figure 2-3). The most visible shift is the government's in-

creasing reliance on revenues from social insurance taxes, chiefly those for Social Security and Medicare's Hospital Insurance (now about 7 percent of GDP), and its diminishing reliance on corporate income taxes and excise taxes (now about 2 percent and 1 percent of GDP, respectively). Individual income taxes, the largest contributor to government coffers, have fluctuated in the range of 8 percent to 9 percent of GDP for three decades. Social insurance taxes are expected to decline marginally as a share of GDP during the projection period, as are corporate and excise taxes. Individual income taxes are expected to increase their share slightly.

The shift in the composition of revenues is also apparent when each source of revenue is viewed as a

Table 2-3.
CBO Revenue Projections (By fiscal year)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In Billions of Dollars												
Individual Income Taxes	656	676	708	740	777	817	857	900	947	994	1,042	1,096
Corporate Income Taxes	172	179	184	187	189	193	198	205	213	223	234	245
Social Insurance Taxes	509	534	553	578	604	630	659	687	717	749	784	820
Excise Taxes	54	54	52	53	53	54	54	55	55	56	57	58
Estate and Gift Taxes	17	19	21	22	23	25	26	28	30	31	33	35
Customs Duties	19	17	19	19	20	21	22	23	25	26	28	29
Miscellaneous	25	28	31	35	39	42	44	45	46	48	49	50
Total	1,453	1,507	1,567	1,634	1,705	1,781	1,860	1,943	2,033	2,127	2,227	2,333
On-budget	1,085	1,119	1,164	1,212	1,263	1,320	1,378	1,440	1,509	1,579	1,652	1,731
Off-budget ^a	367	388	403	422	442	461	482	503	524	549	575	602
As a Percentage of GDP												
Individual Income Taxes	8.8	8.6	8.6	8.6	8.6	8.7	8.7	8.7	8.8	8.8	8.8	8.9
Corporate Income Taxes	2.3	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Social Insurance Taxes	6.8	6.8	6.8	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.6	6.6
Excise Taxes	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
Estate and Gift Taxes	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Customs Duties	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Miscellaneous	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4
Total	19.4	19.3	19.2	19.0	19.0	18.9	18.8	18.8	18.8	18.8	18.8	18.8
On-budget	14.5	14.3	14.2	14.1	14.1	14.0	14.0	13.9	14.0	14.0	14.0	14.0
Off-budget ^a	4.9	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.8	4.8	4.9	4.9

SOURCE: Congressional Budget Office.

a. Social Security.

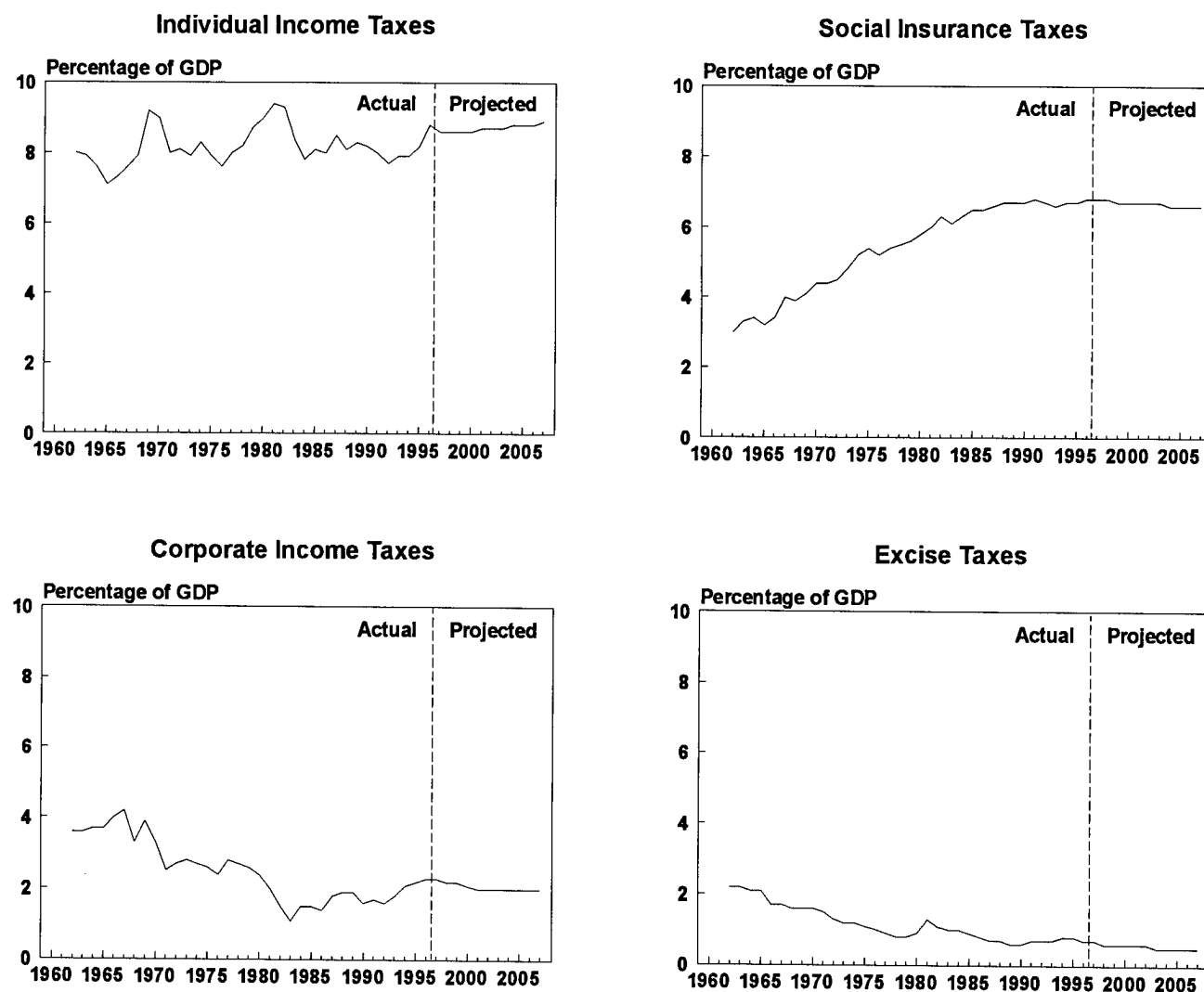
share of total revenues. Social insurance taxes contribute 35 percent of total revenues, up from 25 percent a quarter-century ago. The share of corporate income and excise taxes, by contrast, has declined from 25 percent in 1970 to a current 15 percent. For more than three decades, the share contributed by the individual income tax has remained steady at close to 45 percent. The share contributed by other taxes has remained fairly constant at about 5 percent for two decades. More detailed historical data are contained in Appendix F, which lists annual revenues from each of those sources.

Baseline Projections

In the baseline, individual income taxes are the only major source of revenue that will grow even modestly as a share of GDP: from 8.6 percent in 1997 to 8.9 percent in 2007. The GDP share will creep up over time as rising real incomes cause a larger fraction of income to be taxed in higher brackets.

Social insurance taxes will essentially maintain their share of GDP—just under 7 percent. The slight

Figure 2-3.
Revenues by Source as a Share of GDP



SOURCE: Congressional Budget Office.

decline in the later years of the projection period results principally from the taxes that finance unemployment benefits. Those taxes will not keep pace with increased GDP for three reasons. First, states will be able to reduce their tax rates as the Unemployment Trust Fund is replenished. Second, the Federal Unemployment Tax Act (FUTA) applies only to the first \$7,000 of each covered worker's salary. Third, a FUTA surtax of 0.2 percent expires at the end of 1998.

The corporate income tax is projected to fall from 2.3 percent of GDP in 1996 to 2 percent by 2001, mirroring a decline in corporate profits as a share of GDP. Similarly, excise taxes (which grew in the early 1990s when some tax rates were increased) will fall marginally as a share of GDP, both because some taxes have expired and because excise taxes do not grow in tandem with the economy. Most excise taxes are levied per unit of good or per transaction rather than as a percentage of value.

Table 2-4.
Effect of Extending Tax Provisions That Expired in 1997 or Will Expire Before 2007
(By fiscal year, in billions of dollars)

Tax Provision	Expiration Date	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Expired Provisions												
Airport and Airway Trust Fund Taxes	12/31/96	1.9	5.2	5.5	5.9	6.2	6.6	7.1	7.5	8.0	8.5	9.0
Provisions Expiring in 1997												
Deduction for Contributions to Private Foundations	5/31/97	a	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Exclusion for Employer-Provided Education Assistance	5/31/97	-0.1	-0.4	-0.7	-0.7	-0.7	-0.8	-0.8	-0.9	-0.9	-0.9	-1.0
Orphan Drug Tax Credit	5/31/97	a	a	a	a	a	a	a	a	a	a	a
Credit for Research and Experimentation	5/31/97	-0.7	-1.4	-1.8	-2.2	-2.5	-2.8	-3.1	-3.3	-3.6	-3.9	-4.3
Extension of Generalized System of Preferences	5/31/97	-0.1	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4
Work Opportunity Tax Credit	9/30/97	n.a.	-0.2	-0.3	-0.4	-0.5	-0.6	-0.6	-0.7	-0.7	-0.7	-1.0
Suspension of Non-Commercial Motorboat Diesel Fuel tax	12/31/97	n.a.	a	a	a	a	a	a	a	a	a	a
Provisions Expiring in 1998												
Nonconventional Fuels Credit for Fuel from Biomass and Coal	6/30/98	b	b	a	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4
FUTA Surtax of 0.2 Percentage Points ^c	12/31/98	n.a.	n.a.	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4

SOURCE: Joint Committee on Taxation.

NOTES: FUTA = Federal Unemployment Tax Act; IRS = Internal Revenue Service; n.a. = not applicable. Expiring provision assumes an enactment date of January 1, 1997.

Expiring Provisions

CBO's baseline projections for revenues assume that current tax law remains unchanged and that scheduled changes and expirations occur on time. One category of taxes—excise taxes dedicated to trust funds—constitutes the sole exception to that approach. Under the baseline rules, those taxes are included in the projections even if they are scheduled to expire. The only trust fund excise taxes slated to expire over the projec-

tion period are those for the Highway Trust Fund. By 2007, extending those taxes at today's rates would contribute about \$30 billion to baseline revenues, or more than one-half of the total excise taxes. Although Airport and Airway taxes feed into a trust fund, those revenues are not included in the baseline because they have already expired.

Seven provisions that reduce taxes will expire during 1997 (see Table 2-4). The baseline assumes that

Table 2-4.
Continued

Tax Provision	Expiration Date	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Provisions Expiring in 1999												
Railroad Uses of Diesel Fuel, 1.25 cents per gallon	9/30/99	n.a.	n.a.	n.a.	b	b	b	b	b	b	b	b
Keep tax on non-Commercial Motorboat Diesel Fuel at 24.3 cents per gallon ^d	12/31/99	n.a.	n.a.	n.a.	a	b	b	b	b	b	b	b
Credits for Electricity Production from Wind and Biomass	5/31/99-wind											
	6/30/99-biomass	n.a.	n.a.	n.a.	a	a	a	a	a	a	a	a
Provisions Expiring in 2001												
Andean Trade Preference Initiative	12/04/01	n.a.	n.a.	n.a.	n.a.	n.a.	a	a	a	a	a	a
Tax Credit for Electric Vehicles	12/31/01	n.a.	n.a.	n.a.	n.a.	n.a.	a	a	a	a	a	a
Deduction for Clean-Fuel Vehicles and Refueling Property	12/31/01	n.a.	n.a.	n.a.	n.a.	n.a.	a	a	a	a	a	a
Provisions Expiring in 2002												
Luxury Tax on Passenger Vehicles	12/31/02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.2	0.2	0.2	0.2	0.2
Provisions Expiring in 2003												
IRS User Fees	9/30/03	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	a	a	a	a

a. Loss of less than \$50 million.

b. Gain of less than \$50 million.

c. Estimate assumes the legislation extending the surtax would include provisions increasing the statutory ceilings of the Extended Unemployment Compensation Account (EUCA) and the Federal Unemployment Account (FUA) in the Federal Unemployment Trust Fund. The exclusion of such provisions would result in a much lower net deficit effect. Estimate is net of income and payroll tax offsets.

d. Beginning January 1, 2000, users of noncommercial motorboat diesel will be eligible to file refunds of 20 cents a gallon of the 24.3 cents a gallon tax on diesel fuel. This line shows the revenue effect of permanently extending the full 24.3 cents a gallon tax on this fuel (that is, no refunds).

those provisions will not be extended. If the Congress extended all seven preferences (items that reduce revenues) at least through the projection period, revenues would be smaller than projected by about \$5 billion in 2002 and \$7 billion in 2007.

Another 12 tax provisions are slated to expire between 1998 and 2007. Extending the FUTA surcharge would bring in about \$1 billion per year. Alternatively, extending the nonconventional fuel credit would reduce revenues by nearly \$2 billion between 1999 and 2007. Extending the luxury tax on passenger vehicles after 2002 will add \$1 billion in revenues through 2007. Other expiring provisions have a negligible effect on the budget.

The Spending Outlook

CBO expects that federal spending will total more than \$1.6 trillion in 1997. That spending can be divided into several convenient clusters, based on its treatment in the budget process:

Discretionary spending denotes programs controlled by annual appropriation bills. For those programs, policymakers decide afresh each year how many dollars will be devoted to continuing existing activities and funding new ones. The baseline projections depict the path of discretionary spending as a whole, assuming that the Congress complies with the caps on discretionary spending dictated by the Balanced Budget Act through 1998.

All other spending is controlled by existing laws, and the baseline presents CBO's estimate of spending if those laws and policies remain unchanged. *Entitlements and other mandatory spending* consist overwhelmingly of such benefit programs as Social Security, Medicare, and Medicaid. The Congress generally controls spending for those programs by setting rules for eligibility, benefit formulas, and so on, rather than by voting annually for dollar amounts. *Offsetting receipts*—fees and similar charges that are recorded as negative outlays—are collected without legislative action unless the Congress revisits the underlying laws. And growth in *net interest* spending is driven by the government's deficits and market interest rates.

In total, federal spending now represents about 21 percent of gross domestic product and will remain essentially at that level through 2007, assuming that discretionary spending grows with inflation (see Table 2-5). In the 1960s, federal spending averaged about 19 percent of GDP; for the 1970s and 1980s, the figures were about 21 percent and 23 percent, respectively. Although federal spending as a whole has been relatively constant over the past quarter-century, a pronounced shift has taken place in its composition. The government today spends more on entitlement programs and net interest, and less on discretionary activities, than at any time in the past (see Figure 2-4. Also see Appendix F for more detailed annual historical data for each of the broad categories of spending).

Discretionary Spending

Each year, the Congress starts the appropriation process anew. It votes on budget authority—the authority to commit money—for discretionary budget activities; that authority translates into outlays when the money is actually spent. In any given year, discretionary outlays also include spending from budget authority appropriated in previous years. In 1997, CBO expects that discretionary outlays will total \$547 billion, up \$14 billion from the 1996 level. Assuming growth at the rate of inflation when the caps expire next year, discretionary spending would increase 30 percent—to \$713 billion—by 2007 (see Table 2-5). Those figures include unspecified reductions in discretionary spending that would be required to comply with the cap in 1998, the ramifications of which extend through the projection period. CBO makes no specific assumptions in its projections about where those required reductions would be made.

Defense Discretionary Spending. The share of GDP that is devoted to defense has gradually shrunk in the past three decades. There have been only two major interruptions in the trend: the Vietnam War of the late 1960s and the Reagan-era defense buildup of the early 1980s. Even the costs of Operation Desert Storm appeared as barely a blip in this downward tendency. Today, defense outlays make up about 3.4 percent of GDP (see Figure 2-4). In dollar terms, defense outlays peaked at about \$300 billion annually in the 1989-1991 period (not counting estimated Desert Storm spending

Table 2-5.
CBO Outlay Projections, Assuming Compliance with Discretionary Spending Caps (By fiscal year)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In Billions of Dollars												
Discretionary												
Defense	266	266	270	277	288	289	301	310	319	332	339	345
Domestic and international	266	278	285	292	300	308	316	325	334	344	355	366
Violent Crime Reduction												
Trust Fund	1	2	3	4	5	5	5	5	5	6	6	6
Unspecified reductions ^a	0	0	-15	-14	-15	-7	-9	-9	-9	-12	-8	-5
Subtotal	533	547	543	561	578	595	613	631	650	670	691	713
Mandatory Spending	859	916	976	1,037	1,110	1,161	1,239	1,310	1,390	1,490	1,571	1,654
Offsetting Receipts	-73	-79	-85	-78	-78	-80	-83	-86	-88	-91	-95	-95
Net Interest	241	248	253	261	267	272	279	289	300	312	325	340
Total	1,560	1,632	1,687	1,781	1,877	1,948	2,049	2,145	2,252	2,381	2,492	2,611
On-budget	1,260	1,320	1,363	1,449	1,530	1,586	1,670	1,751	1,842	1,952	2,044	2,142
Off-budget ^b	300	311	324	332	346	362	379	394	411	429	448	469
As a Percentage of GDP												
Discretionary ^a												
Defense	3.6	3.4	3.3	3.2	3.2	3.1	3.0	3.0	3.0	2.9	2.9	2.8
Domestic and international	3.5	3.6	3.5	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	3.0
Violent Crime Reduction												
Trust Fund	c	c	c	0.1	0.1	0.1	0.1	0.1	0.1	c	c	c
Unspecified reductions	0	0	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Subtotal	7.1	7.0	6.6	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.8
Mandatory Spending	11.5	11.7	11.9	12.1	12.3	12.3	12.6	12.7	12.8	13.2	13.3	13.4
Offsetting Receipts	-1.0	-1.0	-1.0	-0.9	-0.9	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
Net Interest	3.2	3.2	3.1	3.0	3.0	2.9	2.8	2.8	2.8	2.8	2.7	2.7
Total	20.8	20.8	20.6	20.8	20.9	20.7	20.8	20.8	20.8	21.0	21.1	21.1
On-budget	16.8	16.9	16.7	16.9	17.0	16.8	16.9	16.9	17.0	17.3	17.3	17.3
Off-budget ^b	4.0	4.0	4.0	3.9	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8

SOURCE: Congressional Budget Office.

a. These reductions represent the cuts that would be needed to comply with the statutory cap in 1998 and the effects of those cuts projected into the future.

b. Social Security and the Postal Service.

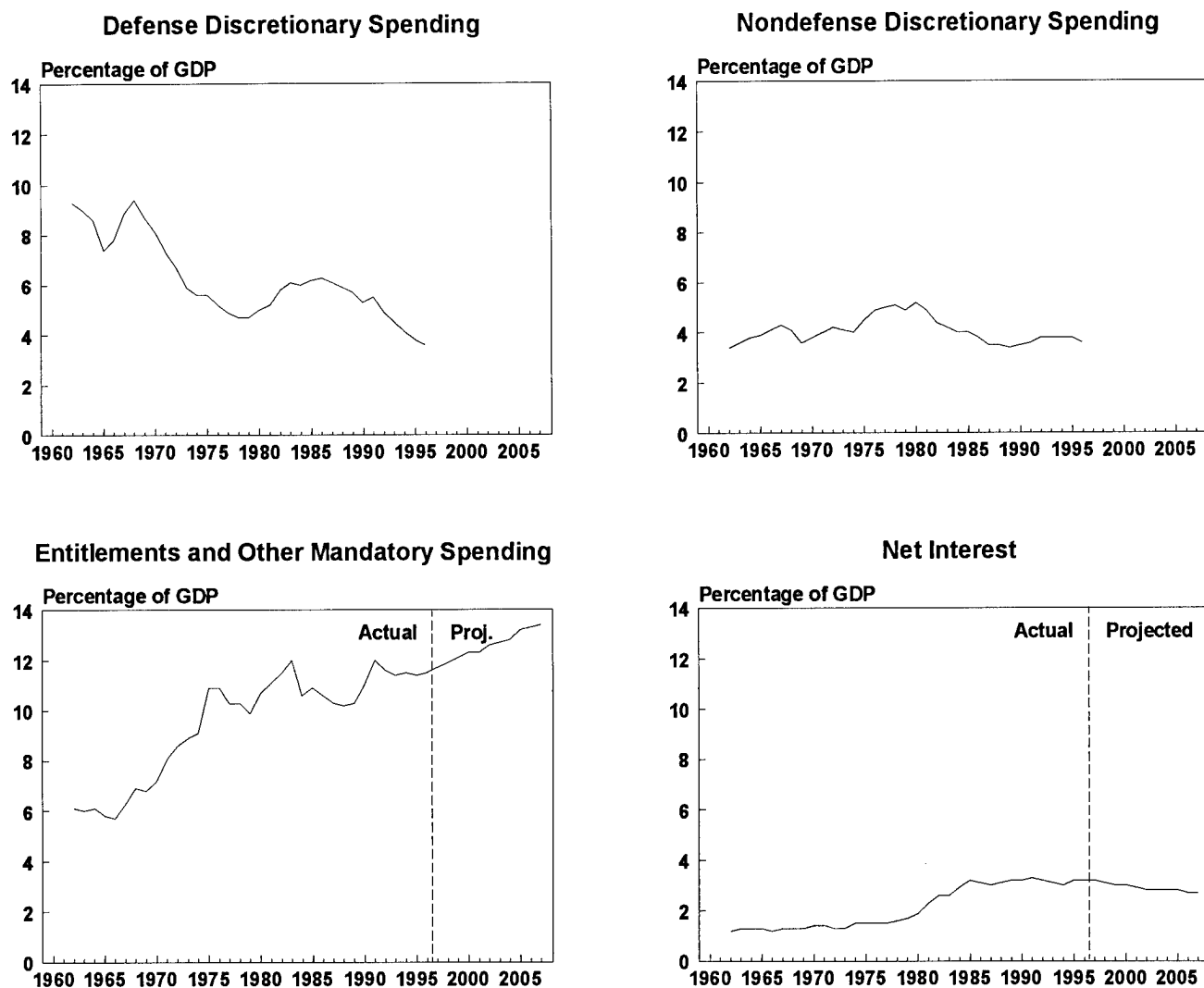
c. Less than 0.05 percent of gross domestic product.

in that final year). At \$266 billion in 1997, defense outlays are down about 10 percent from those levels in dollar terms and about one-third in real terms.

The reduction in defense spending over the past five years can be traced to two major sources: reductions in personnel and postponement of new weapons purchases. Attrition, early retirement, other voluntary incentives, and involuntary separations (caused by base

closures, for example) have reduced the number of members of the armed services from about 2 million in 1991 to 1.5 million in 1996. Likewise, for the same reasons, civilian employment by the Department of Defense has declined from a little over 1 million five years ago to 825,000 today. Such reductions in forces have enabled the military to retire some older equipment without replacement. Soon after the turn of the century, however, large blocks of equipment purchased during

Figure 2-4.
Outlays by Category as a Share of GDP



SOURCE: Congressional Budget Office.

NOTE: Discretionary spending is only shown through 1997 because its future path depends on unspecified reductions necessary to comply with the discretionary cap in 1998.

the buildup of the early 1980s will require refurbishing or replacement. The end of this procurement holiday may necessitate higher defense spending in the next decade.

Nondefense Discretionary Spending. Even as defense spending generally drifted down as a share of GDP in the 1960s and 1970s, other discretionary spending climbed slowly, peaking at 5.2 percent of GDP in 1980 before its rise was reversed. Today, nondefense discretionary spending totals about 3.6 percent of GDP, not quite three-fourths of its peak level in the mid-1970s. Approximately 25 percent of that spending pays federal employees at nondefense agencies.

Nondefense discretionary spending encompasses a broad array of federal activities (see Table 2-6). Leading claimants of the \$278 billion in expected general-purpose outlays for 1997 are income security—chiefly housing subsidies—and the administrative costs of running benefit programs (\$41 billion); education, training, and social services (\$40 billion); transportation (\$37 billion); the administration of justice and general activities such as running the Internal Revenue Service (together, \$29 billion); health research and public health

(\$24 billion); natural resources and environment (\$22 billion); veterans' benefits other than direct cash payments, chiefly medical care (\$20 billion); international programs (\$19 billion); and space and science (\$17 billion). Spending from the Violent Crime Reduction Trust Fund is expected to total an additional \$2 billion.

Discretionary Spending and the Statutory Caps Through 1998. Since 1991, dollar caps set in the Budget Enforcement Act and the Omnibus Budget Reconciliation Act of 1993 (as amendments to the Balanced Budget Act) have restricted spending for discretionary programs. In 1991 through 1993, separate caps applied to defense, international, and domestic appropriations. Since 1994, a single lid has applied to all three categories (although a separate cap has been established for the VCRTF), thus sharpening the competition for resources.

Individual caps apply to budget authority and outlays. *Budget authority* is the basic currency of the appropriation process; it represents the permission to commit funds. That commitment always precedes actual *outlays* or disbursements—with a short lag for fast-spending activities such as meeting payrolls or directly providing services, and a longer lag for slow-spending activities such as the procurement of weapons or other complex items. Because the caps limit both budget authority and outlays, the more stringent one prevails. In 1992 through 1995, appropriators found the outlay cap more difficult to satisfy, and budget authority was therefore billions of dollars under its limit. In 1996, the caps were not really an issue; appropriations were well below the statutory limitations.

In 1997, though, the appropriators boosted budget authority \$12 billion above its 1996 level. Much of the outlays resulting from the increased budget authority are offset in 1997 by one-time receipts from recapitalizing deposit insurance funds and from auctioning electromagnetic spectrum. The effect of increased appropriations in 1997 will cause the caps to pinch hard in 1998, however. Both budget authority and outlays necessary to preserve discretionary resources at their real 1997 level are expected to exceed their respective caps (see Table 2-7). Freezing discretionary budget authority at the 1997 level would bring the 1998 total in at \$509 billion, well below the statutory cap; however, such a freeze on spending at the 1997 level would leave 1998 outlays \$4 billion above the outlay cap.

Table 2-6.
Nondefense Discretionary Spending,
Fiscal Year 1997 (In percent)

Federal Activities	Percent
Administration of Justice and General Government	10.4
Education and Training	14.2
Health Research and Public Health	8.5
Income Security	14.5
International	6.9
Natural Resources and Environment	7.8
Space and Science	6.0
Transportation	13.2
Veterans' Benefits	7.3
Violent Crime Reduction Trust Fund	0.8
Other	10.6
Total	100.0

SOURCE: Congressional Budget Office.

Table 2-7.
How Tight Are the Discretionary Caps in 1998? (By fiscal year, in billions of dollars)

	Comparison of Statutory Caps with Amount Needed to Preserve Real Resources at 1997 Level	Comparison of Statutory Caps with Amount Needed to Freeze Dollar Resources at 1997 Level
Budget Authority		
1998 Statutory Cap Level	527	527
Projected Amounts		
Defense	273	266
Domestic and International	252	239
Violent Crime Reduction Trust Fund	<u>5</u>	<u>5</u>
Total	530	509
Amount over or under (-) caps	4	-17
Outlays		
1998 Statutory Cap Level	543	543
Projected Amounts		
Defense	270	265
Domestic and International	285	279
Violent Crime Reduction Trust Fund	<u>3</u>	<u>3</u>
Total	559	547
Amount over or under (-) caps	15	4

SOURCE: Congressional Budget Office.

NOTES: The amount needed to preserve 1997 real resources includes an adjustment for inflation of about 3 percent in 1998. The amount needed to freeze 1997 resources includes no adjustment for inflation. There are no discretionary caps after 1998.

Discretionary Programs After 1998. The discretionary caps expire after 1998, at which point such spending will have been more or less frozen for eight years. (See Appendix B for a discussion of procedural constraints on the budget.) The outlook for the deficit after 1998 hinges on annual appropriations and what, if anything, is done in the future with caps on discretionary spending.

The caps on discretionary spending appear to have played a key role in controlling the deficit, although adhering to the caps was made easier by the end of the Cold War, thereby enabling defense programs to bear the brunt of any necessary reductions (see Box 2-1 for a discussion of the decline in the deficit over the past four

years). If discretionary spending had grown in step with inflation after 1991, it would have reached \$632 billion in 1997 rather than the \$547 billion projected for this year.

CBO's baseline assumes compliance with the statutory caps through 1998. If discretionary spending keeps pace with inflation thereafter, the deficit would climb to \$278 billion in 2007 (see Table 2-8).¹ As a percentage of GDP, the deficit would rise from 1.6 per-

1. If discretionary spending was inflated starting in 1998, without regard to the statutory cap still in effect, the deficit would be \$136 billion in 1998, \$162 billion in 1999, \$189 billion in 2000, \$177 billion in 2001 and \$201 billion in 2002.

Box 2-1.
Declining Deficits: 1992-1996

The deficit has declined dramatically over the past four years, falling from \$290 billion in 1992 to \$107 in 1996 (see table). That 63 percent drop has been achieved by rapidly rising revenues in conjunction with only moderate growth in outlays.

Revenues grew 33 percent between 1992 to 1996 in dollar terms; as a percentage of GDP, revenues jumped from 17.7 percent to 19.4 percent. Recovery from the recession of the early 1990s and continuing economic expansion, combined with tax rate increases in the Omnibus Budget Reconciliation Acts of 1990 and 1993, helped boost corporate income tax receipts by 71 percent and individual income tax receipts by 38 percent over the four-year period. That growth dwarfed increases in outlays for programs other than Medicare and Medicaid. In total, outlays rose only 13 percent over the period, mirroring a similar growth in the rate of inflation. Medicare and Medicaid continued their rapid rates of growth during that time (48 percent and 36 percent, respectively). But other mandatory programs, such as Food Stamps and unemployment insurance, restrained by the upswing in the business cycle, grew by

only 2.5 percent. During the four-year period, discretionary programs fluctuated around \$540 billion a year, although spending on nondefense programs rose by 15 percent at the same time that defense spending dropped by 12 percent.

The patterns of the past four years illustrate the challenges that lie ahead in further reducing the deficit. Even in the context of healthy revenue growth, moderate increases in mandatory spending, and a near freeze on discretionary outlays since 1992, the federal budget is still in deficit by more than \$100 billion. Taming the rapid growth in federal health care programs will be necessary to achieve any lasting budgetary equilibrium.

Balancing the budget may also require some luck. A downturn in the economy could sharply reduce revenue growth and require more spending on entitlements. Conflict elsewhere in the world could force an increase in defense spending. And an unforeseen shock to the credit markets could boost payments for interest on the public debt. Continuing the favorable trends of the past four years will not be easy.

Federal Revenues, Outlays, and Deficits for Fiscal Years 1992-1996 (In billions of dollars)

	1992	1993	1994	1995	1996	Change 1992 to 1996	
						Dollars	Percent
Revenues							
Individual income taxes	476	510	543	590	656	180	37.9
Corporate income taxes	100	118	140	157	172	72	71.4
Social insurance taxes	414	428	461	484	509	96	23.1
Other	101	98	113	123	115	15	14.5
Total	1,090	1,154	1,258	1,352	1,453	362	33.2
Outlays							
Discretionary							
Defense	303	292	282	274	266	-36	-11.9
Nondefense	232	249	262	272	267	35	15.1
Subtotal	534	541	544	546	533	-1	-0.2
Mandatory							
Social Security	285	302	317	333	347	62	21.7
Medicare	129	143	160	177	191	62	47.8
Medicaid	68	76	82	89	92	24	35.6
Deposit insurance	3	-28	-8	-18	-8	-11	-420.9
Other mandatory	231	243	232	237	237	6	2.5
Subtotal	716	736	783	818	859	143	19.9
Offsetting receipts	-69	-67	-69	-80	-73	-4	5.4
Net interest	199	199	203	232	241	41	20.7
Total	1,381	1,409	1,461	1,516	1,560	179	13.0
Deficit	290	255	203	164	107	-183	-63.1

SOURCE: Congressional Budget Office.

cent in 1997 to 2.2 percent in 2007. Discretionary programs themselves would not absorb a growing share of GDP. Because they would grow no faster than inflation, they would actually shrink in relation to GDP. But they would not shrink enough to offset trends in mandatory spending, interest, and revenues that tug in the opposite direction.

Alternatively, policymakers could opt to keep discretionary spending frozen at the level of the 1998 cap. That would allow the deficit to drop to just 0.4 percent of GDP by 2007. The improvement in the deficit,

though, would come at the price of steady reductions in the activities and services funded by those appropriations.

Entitlements and Mandatory Programs

More than half of the \$1.6 trillion in federal spending goes for entitlements and mandatory programs (other than net interest). If current policies remain unchanged, mandatory spending will be twice as large as discretionary spending by 2002. Mandatory programs make pay-

Table 2-8.
Two Scenarios for Discretionary Spending and the Deficit (By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Baseline Projections with Inflation in Discretionary Programs After 1998											
Revenues	1,507	1,567	1,634	1,705	1,781	1,860	1,943	2,033	2,127	2,227	2,333
Outlays											
Discretionary	547	543	561	578	595	613	631	650	670	691	713
Net interest	248	253	261	267	272	279	289	300	312	325	340
All other	<u>836</u>	<u>890</u>	<u>959</u>	<u>1,032</u>	<u>1,081</u>	<u>1,156</u>	<u>1,224</u>	<u>1,302</u>	<u>1,399</u>	<u>1,476</u>	<u>1,558</u>
Total	1,632	1,687	1,781	1,877	1,948	2,049	2,145	2,252	2,381	2,492	2,611
Deficit	124	120	147	171	167	188	202	219	254	266	278
Deficit as a Percentage of GDP	1.6	1.5	1.7	1.9	1.8	1.9	2.0	2.0	2.2	2.2	2.2
Baseline Projections Without Inflation in Discretionary Programs After 1998											
Revenues	1,507	1,567	1,634	1,705	1,781	1,860	1,943	2,033	2,127	2,227	2,333
Outlays											
Discretionary	547	543	542	542	535	535	534	533	535	532	530
Net interest	248	253	261	265	267	270	275	279	282	285	288
All other	<u>836</u>	<u>890</u>	<u>959</u>	<u>1,032</u>	<u>1,081</u>	<u>1,156</u>	<u>1,224</u>	<u>1,302</u>	<u>1,399</u>	<u>1,476</u>	<u>1,558</u>
Total	1,632	1,687	1,761	1,839	1,883	1,962	2,033	2,114	2,216	2,294	2,376
Deficit	124	120	128	134	102	101	89	81	89	67	44
Deficit as a Percentage of GDP	1.6	1.5	1.5	1.5	1.1	1.0	0.9	0.7	0.8	0.6	0.4

SOURCE: Congressional Budget Office.

NOTE: Caps on discretionary spending are set by law through 1998. The first scenario assumes that discretionary spending complies with the caps through 1998 and grows at the rate of inflation thereafter. The second assumes that discretionary spending complies with the caps through 1998 and is frozen thereafter.

ments to recipients—usually people, but sometimes businesses, not-for-profit institutions, or state and local governments—that are eligible and apply for funds. Payments are governed by formulas set by law and are not constrained by annual appropriation bills.

The Balanced Budget Act lumps mandatory programs (other than Social Security) together with receipts and subjects them to pay-as-you-go discipline; that is, liberalizations in those programs must be funded by cutbacks in other mandatory spending or by increases in taxes or fees. (Similarly, tax cuts must be offset by tax increases or reductions in mandatory spending.) Violation of the pay-as-you-go rules will trigger a sequestration—an across-the-board reduction in spending authority—to ensure that the deficit is not increased. Social Security has its own set of procedural safeguards, which the Congress established to prevent policy actions that would worsen the long-run condition of the trust funds.

Less than one-fourth of entitlements and mandatory spending—approximately one-eighth of all federal spending—is means-tested; that is, paid to people who must document their need on the basis of income or assets (and often other criteria, such as family status). The remainder, led by the government's big retirement-related programs, have no such requirements and are labeled non-means-tested.

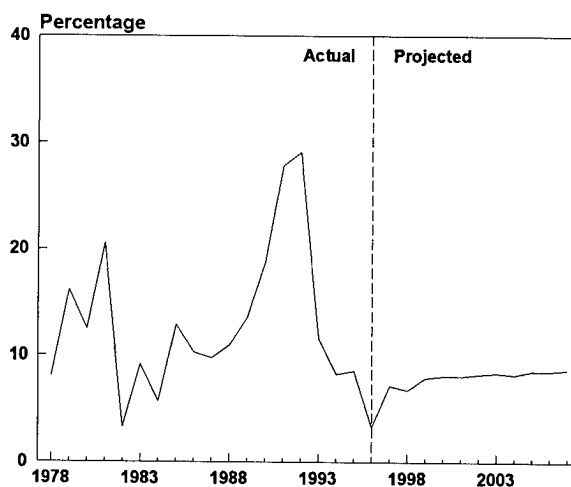
Means-Tested Programs. Medicaid, the joint federal and state program providing medical care to many of the poor, makes up about half of means-tested entitlements. CBO projects that federal outlays for Medicaid will grow from \$92 billion in 1996 to \$216 billion in 2007—an average annual growth rate of 8 percent (see Table 2-9). Spending for medical assistance payments is projected to rise from \$79 billion in 1996 to \$186 billion, and spending for payments to hospitals that serve a disproportionate share of poor people—so-called DSH payments—is estimated to rise from \$9 billion in 1996 to almost \$20 billion in 2007. Administrative expenses account for the rest of the program's spending.

The growth in Medicaid has subsided from the sky-high rates of the early 1990s. Spending for the Medicaid program jumped between 20 percent and 30 percent a year from 1990 through 1992, but its growth decelerated to an average of about 10 percent from 1993

through 1995 and to just 3.3 percent in 1996 (see Figure 2-5). The surge in the program was fueled primarily by two factors: the states' use of provider donations and taxes and intragovernmental transfers that generated federal matching funds to disproportionate share hospitals. States also shifted services that were previously funded solely at the state level into the Medicaid program. Both of these factors made states better off because they were able to gain access to federal matching funds without committing any new state resources. Other factors that contributed to the growth of Medicaid in the early 1990s were federally legislated as well as state-initiated enrollment expansions (especially for coverage of poor children and low income Medicare beneficiaries), the recession of 1990-1991, and increased provider payment rates.

Last year's low growth rate, one of the smallest annual increases since Medicaid started in 1965, may be attributed in part to general uncertainty about the outcome of proposals to reform the program as well as to states' efforts to maximize their share of any new system. (Anticipating proposals for a Medicaid block grant, a state could have increased the base on which its future federal funding would have been computed by shifting some spending from 1996 to 1995.) That uncertainty contributed to an erratic spending pattern; federal expenditures did not increase at all above the 1995

Figure 2-5.
Rate of Growth in Medicaid Outlays
from Previous Fiscal Year



SOURCE: Congressional Budget Office.

Table 2-9.
CBO Baseline Projections for Mandatory Spending, Including Deposit Insurance
(By fiscal year, in billions of dollars)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Means-Tested Programs												
Medicaid	92	99	105	114	123	133	144	156	169	183	199	216
Food Stamps ^a	25	25	25	27	28	29	29	30	31	32	33	34
Supplemental Security Income	24	28	26	28	32	29	34	36	39	45	44	43
Family Support	18	19	20	21	21	22	22	22	22	23	23	23
Veterans' Pensions	3	3	3	3	3	3	3	3	3	4	3	3
Child Nutrition	8	8	8	9	9	10	10	11	11	12	12	13
Earned Income Tax Credit	19	21	22	22	23	24	25	26	27	28	29	30
Student Loans	4	3	3	3	3	4	4	4	4	4	4	5
Other	4	4	4	5	5	6	6	7	7	7	8	8
Total	196	208	217	232	249	259	277	295	314	338	356	375
Non-Means-Tested Programs												
Social Security	347	364	381	400	420	441	464	487	513	539	568	599
Medicare ^b	191	209	227	248	273	286	314	339	368	410	438	464
Subtotal	538	573	608	648	693	726	777	827	881	949	1,005	1,063
Other Retirement and Disability												
Federal civilian ^c	44	46	49	51	54	57	60	63	67	71	75	79
Military	29	30	31	32	33	34	35	37	38	39	40	42
Other	5	5	5	5	5	5	5	5	5	5	5	5
Subtotal	77	81	84	88	92	96	100	105	110	115	121	126
Unemployment Compensation	22	23	24	26	28	29	30	32	33	34	36	37
Deposit Insurance	-8	-12	-4	-3	-1	d	d	-1	-1	-1	-1	-1
Other Programs												
Veterans' benefits ^a	17	19	20	21	23	20	22	23	23	25	24	23
Farm Price Supports	5	6	7	7	7	5	5	5	5	5	5	5
Social services	5	5	5	5	6	6	6	6	6	6	6	6
Credit reform												
liquidating accounts	-9	-7	-7	-7	-7	-6	-6	-6	-6	-7	-7	-7
Other ^f	14	19	21	19	22	26	27	25	25	25	25	26
Subtotal	33	42	46	46	50	51	54	52	53	55	54	53
Total	662	707	758	805	861	902	962	1,015	1,076	1,152	1,215	1,278
Total												
All Mandatory Spending	859	916	976	1,037	1,110	1,161	1,239	1,310	1,390	1,490	1,571	1,654

SOURCE: Congressional Budget Office.

NOTE: Spending for benefit programs shown above generally excludes administrative costs, which are discretionary.

a. Includes nutrition assistance to Puerto Rico.

b. Spending for Medicare excludes premiums, which are considered offsetting receipts.

c. Includes Civil Service, Foreign Service, Coast Guard, other retirement programs, and annuitants' health benefits.

d. Less than \$500 million.

e. Includes veterans compensation, readjustment benefits, life insurance, and housing programs.

f. Includes the Universal Service Fund.

level during the first half of 1996, but grew at an annual rate of more than 6 percent during the second half of the year.

CBO's Medicaid projection reflects a continuation of relatively low rates of growth in the near term and somewhat higher rates after 2002, as pressures for higher spending reemerge. These pressures come from several directions. First, CBO believes that savings from expanding enrollment in managed care are not likely to be large in the long run. Current fee-for-service reimbursement rates are already low, and the beneficiaries being moved into managed care account for only about one-third of Medicaid spending. It will be difficult to develop appropriate and cost-saving models of managed care for elderly and disabled beneficiaries (particularly those in long-term care) who account for the bulk of Medicaid expenditures. Second, states still have the ability to secure additional federal funds at no expense to themselves by utilizing Medicaid maximization techniques or intergovernmental transfers. Finally, pressures for increased utilization of services continue in a number of areas, including noninstitutional long-term care, prescription drugs, and other acute care services.

A growth rate of 8 percent a year in Medicaid falls within a range of plausible outcomes. In the light of experience, one might project that growth in Medicaid spending could exceed 10 percent a year. It seems less likely, however, that Medicaid could maintain growth rates of less than 6 percent a year in the long run.

Many of the other means-tested programs were affected by the welfare reform legislation that the Congress passed in 1996. Growth rates in programs such as Food Stamps, Supplemental Security Income, and Family Support have been somewhat mitigated either by being turned into block grants to states or by restrictive new provisions on benefits. Nevertheless, SSI payments will nearly double and outlays for Food Stamps will grow by one-third by 2007. Growth in 1997 in the refundable portion of the earned income credit (EIC) is influenced by the final phase-in of benefit increases stemming from 1993 legislation; over the longer term, the indexing of certain guidelines for program eligibility and the increase in the population of eligible workers accounts for growth that is slightly faster than inflation. Although the EIC is a provision of the tax code,

direct payments to recipients who otherwise owe no taxes are treated as outlays because they are equivalent to benefit payments. Those direct payments account for more than 80 percent of the EIC's total cost.

One program categorized as means-tested—student loans—fits somewhat uneasily into that category. The student loan program is making or guaranteeing ever-larger volumes of loans (estimated at \$28 billion in 1997, \$37 billion in 2002, and \$47 billion in 2007). A large portion of that volume—approximately 40 percent—goes to students or parents who may borrow regardless of income or assets. Since 1992, under the reformed accounting for credit programs mandated by the Budget Enforcement Act, the outlays for new loans that are recorded in the budget have not represented annual cash flows. Instead, they have represented the estimated long-run loss to the government from subsidizing interest charges, defaults, and other expected costs over the lifetime of the loans. That is why the student loan program shows costs of only \$3 billion to \$5 billion a year. Those costs are primarily associated with students and parents who satisfy the income and asset tests. Although all borrowers have some propensity to default and all enjoy such benefits as caps on interest rates, only the subset of low-income borrowers qualifies for one of the most attractive and costly features of the program—an interest-free period while the student remains in school.

Non-Means-Tested Programs. The Social Security, Medicare, and other retirement and disability programs dominate non-means-tested entitlements. Social Security is the largest federal program by far, with expected expenditures of \$364 billion in 1997. Most Social Security beneficiaries, who currently number nearly 44 million and are expected to increase to almost 51 million in 2007, also participate in Medicare.

Although Social Security is the larger program, Medicare has grown much faster despite repeated efforts to rein in its costs. Over the past decade, Medicare grew by an average of 10 percent a year compared with Social Security's 6 percent; for the next decade, Medicare is projected to grow by an average of 9 percent a year and Social Security by 5 percent. The share of the economy devoted to Social Security will remain fairly constant over that period—at about 4.7 percent of GDP; Medicare's share will increase by a full percent-

Box 2-2. Universal Telephone Service

The Telecommunications Act of 1996 requires the Federal Communications Commission (FCC) to adopt policies by May 1997 ensuring universal access to telecommunications services. Currently, universal access to telephone service—called universal service—is provided through various types of subsidies flowing to local telephone companies from other local telephone and long distance carriers. Telephone companies also subsidize their high-cost customers internally by charging high- and low-cost customers approximately the same rates, so that the excess amount paid by low-cost customers makes up for the loss in providing service to high-cost customers. The Congressional Budget Office (CBO) expects the FCC to replace this current patchwork of subsidies with an explicit support system.

All interstate telecommunications carriers will be required to contribute to the new universal service fund. Carriers that provide telecommunications services to high-cost areas, low-income people, schools, libraries, and nonprofit, rural health care providers would be eligible to receive support from the fund. CBO expects the universal service fund to be administered by a neutral third party appointed by the FCC.

The cash flows from the universal service fund appear in the budget as governmental receipts and direct spending because payments between companies are

made as a result of the exercise of the sovereign power of the federal government, not as normal business transactions between companies. Currently, only cash flows that result from FCC rules that predate the Telecommunications Act of 1996 are recorded on the budget. As the universal service fund provisions are put into place, CBO projects that the receipts and outlays from the universal service fund will rise from \$1.4 billion in 1997 to \$13.1 billion in 2007. Those figures represent primarily subsidies flowing from low-cost areas to high-cost areas that are currently in place. Therefore, they do not for the most part depict new transfers of income among telecommunications producers and consumers. Providing nonprofit rural health care providers, elementary and secondary schools, and libraries with affordable access to advanced telecommunications (entities that were not covered before the Telecommunications Act) is expected to account for about \$2 billion of those outlays each year after the turn of the century.

Although revenues coming into the fund are expected to equal spending out of the fund so that the overall effect is deficit neutral, there is considerable uncertainty about the actual size of those flows. In May, the FCC will issue regulatory guidelines that will clarify the situation and perhaps lead to a substantial change in CBO's estimates of Universal Service fund activity.

age point, from 2.7 percent to 3.7 percent of GDP. (See Appendix G for a more comprehensive discussion of CBO's Medicare projections.)

Other retirement and disability programs, totaling \$81 billion in 1997, amount to less than one-fourth the size of Social Security. They are dominated by benefits for the federal government's civilian and military retirees and Railroad Retirement, and are expected to grow slightly faster than inflation.

Spending for both unemployment compensation and deposit insurance has declined from the crests that it reached in the early 1990s. Outlays for unemployment compensation peaked at \$37 billion in 1992 and are now less than two-thirds as large. They are ex-

pected to grow moderately in future years because of growth in wages and the labor force. Outlays for deposit insurance reached their pinnacle of \$66 billion in 1991 and are expected to be negligible once the Bank Insurance Fund and Savings Association Insurance Fund are recapitalized.

Other non-means-tested entitlements encompass a diverse set of programs, mainly veterans' benefits, farm price supports, certain social service grants to the states, and the Universal Service Fund, which was broadened by provisions in the telecommunications reform bill. (See Box 2-2 for an explanation of the Universal Service Fund.) That category will total \$42 billion in 1997 and will grow at about the same rate as inflation throughout the projection period.

Table 2-10.
Sources of Growth in Mandatory Spending (By fiscal year, in billions of dollars)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Estimated Spending for Base Year 1997	916	916	916	916	916	916	916	916	916	916
Sources of Growth										
Increases in caseload	7	19	32	44	57	70	84	99	116	135
Automatic increases in benefits										
Cost-of-living adjustments	10	25	41	57	74	92	109	129	148	167
Other ^a	9	18	26	35	43	53	64	77	91	106
Other increases in benefits										
Increases in Medicare and Medicaid ^b	16	34	54	74	98	123	150	181	213	246
Growth in Social Security ^c	5	8	11	15	21	26	33	40	47	56
Irregular number of benefit payments ^d	0	0	8	-8	0	0	0	14	1	-16
Change in outlays for deposit insurance	7	9	10	11	11	11	11	11	10	10
Remaining sources of growth	<u>6</u>	<u>8</u>	<u>11</u>	<u>17</u>	<u>20</u>	<u>20</u>	<u>23</u>	<u>24</u>	<u>28</u>	<u>32</u>
Total	60	121	194	245	324	395	474	575	655	738
Projected Spending	976	1,037	1,110	1,161	1,239	1,310	1,390	1,490	1,571	1,654

SOURCE: Congressional Budget Office.

- a. Automatic increases in Food Stamp and child nutrition benefits, certain Medicare reimbursement rates, and the earned income credit under formulas specified by law.
- b. All growth not attributed to caseloads and automatic increases in reimbursement rates.
- c. All growth not attributed to caseloads and cost-of-living adjustments.
- d. Represents baseline differences attributable to assumptions about the number of benefit checks that will be issued in a fiscal year. Supplemental Security Income, veterans' benefits, and Medicare payments to health maintenance organizations will pay 11 months of benefits in 2001 and 2007, 13 in 2000 and 2005, and 12 in other years.

Why Does Mandatory Spending Increase? Spending for entitlements and mandatory programs as a whole has more than doubled during the past decade, rising faster than both nominal growth in the economy and the rate of inflation. Such rapid growth has prompted examinations of ways to curtail costs. Some analysts favor a formula-based approach for curbing growth—for example, simply limiting annual growth in outlays to the sum of growth in caseloads plus inflation and enforcing the limit through across-the-board cut-backs.² Such an approach, however, does not specifically reexamine the justification for each program or probe why some appear to be growing disproportionately.

Why does mandatory spending grow as fast as it does in the baseline? One convenient way of analyzing such growth is to break it down by its major causes. That analysis shows that greater utilization of medical services, automatic increases in benefits, and rising caseloads will account for more than 85 percent of the growth in entitlements and other mandatory programs between 1997 and 2007.

Mounting caseloads account for only about one-fifth of the growth in entitlement programs. Compared with this year's outlays, spending will increase as a result of higher caseloads by \$7 billion in 1998 and \$135 billion in 2007 (see Table 2-10). The majority of that growth is concentrated in the Social Security and Medicare programs and is traceable to continued growth in the population of elderly and disabled people. Much of the rest is in Medicaid. Among those three programs,

2. Congressional Budget Office, *Mandatory Spending Control Mechanisms*, CBO Paper (February 1996).

growth in caseloads alone boosts outlays by at least 15 percent apiece during the 1998-2007 period.

Automatic increases in benefits account for more than one-third of the growth in entitlement programs. All of the major retirement programs grant automatic cost-of-living adjustments (COLAs) to their beneficiaries. Those adjustments, which are pegged to the consumer price index, are expected to average approximately 3 percent a year through 2007. In 1997, outlays for programs with COLAs are nearing \$500 billion, and COLAs are expected to add an extra \$10 billion in 1998 and \$167 billion in 2007. Recent studies have suggested that the consumer price index overestimates the increase in the cost of living. Box 2-3 illustrates the budgetary effect of reducing the cost-of-living adjustment.

Several other programs—chiefly the earned income credit, Food Stamps, and Medicare—are also automatically indexed to changes in prices. The income thresholds above which the EIC begins to be phased out are automatically adjusted for inflation using the consumer price index. The Food Stamp program makes annual adjustments to its benefit payments according to changes in the Department of Agriculture's Thrifty Food Plan index. Medicare's payments to providers are based in part on special price indexes for the medical sector. The combined effect of indexing for these programs contributes an extra \$9 billion in outlays in 1998 and \$106 billion in 2007.

Medicaid is the only major entitlement program that is not automatically indexed for inflation at the federal level. Medicaid payments to providers are de-

Box 2-3.

Budgetary Effects of Potential Overstatements in the Consumer Price Index

The consumer price index (CPI), compiled by the Bureau of Labor Statistics, has come under fire recently for overstating changes in the cost of living. By design, the CPI measures the price of a fixed market basket of goods and services over a specific time period (the current market basket is based on surveys of household purchases during the 1982-1984 period). The response of consumers to price changes is therefore not taken into account in the measurement. In addition, changes in quality may not be accurately measured, new products are often not included in the market basket until long after being introduced, and for technical reasons the construction of the CPI may impart an upward bias to the measure.

Because the CPI determines the size of the cost-of-living adjustment made by a number of federal benefit programs and is also used to adjust elements of the tax code, the budget can be substantially affected by any significant overstatement in its calculation. Concern over bias in the inflation measure prompted the Senate Committee on Finance to appoint a panel of economists, known as the Boskin Commission, to study the issue. According to the Commission's report, the CPI may overstate the increase in the cost of living by 0.8 to 1.6 percentage points a year.¹

Although economists generally seem to agree with the Boskin Commission that the CPI exaggerates increases

in the cost of living, there is no consensus about exactly how much. Some investigators argue that the bias is even greater than 1.6 percentage points; others believe that the bias is very small. For illustrative purposes, then, CBO has estimated the effect on cash benefit programs and revenues if changes in procedures for measuring the CPI caused it to grow at a slower rate of 1 percentage point (see table at right).

Social Security accounts for almost three-quarters of the effect on indexed federal outlays. By 2007, a reduction of 1 percentage point each year in the CPI would decrease benefit payments by \$45 billion in that program alone. Other benefit payments for programs such as civil service retirement and supplemental security income would be \$19 billion lower in 2007.

Revenues would be greater because personal income tax brackets, the personal exemption, and the standard deduction are indexed to the CPI. If the CPI grows at a slower pace, brackets would move up less rapidly and a greater percentage of total income would be taxed at higher marginal rates. By 2007, the lower CPI calculation would boost revenues by \$44 billion. Lowering the projected tax brackets would also lead to reductions in outlays for the earned income credit.

Interest savings resulting from increased revenues and decreased outlays would add another \$32 billion in savings in 2007. By that year, the deficit would be \$140 billion smaller if the CPI had grown 1 percentage point a year slower.

1. See Advisory Commission to Study the Consumer Price Index, *Toward a More Accurate Measure of the Cost of Living* (December 4, 1996).

terminated by the states and the federal government matches those payments. If states increase payments, federal payments will rise. (Higher payments to states are treated as "other" increases in Table 2-10.)

Another 40 percent of the growth in entitlement spending stems from increases that cannot be attributed to growth in caseloads or automatic adjustments in reimbursements. Those sources of growth are expected to become even more important over time. First, Medicaid spending grows with inflation even though it is not formally indexed (as discussed above). Second, the health programs have faced steadily rising costs per participant; that trend, which is often termed an increase in "intensity," reflects the consumption of more

services per participant and the increasing use of more costly procedures. The residual growth in Medicare and Medicaid will amount to \$16 billion in 1998 and \$246 billion in 2007.

In most retirement programs, the average benefit grows faster than the COLA alone would explain. Social Security is a prime example. Because new retirees have more recent earnings that have been bolstered by real wage growth, their benefits generally exceed the monthly check of a long-time retiree who last earned a salary a decade or two ago and has been receiving only cost-of-living adjustments since then. And because more women are working, more new retirees receive benefits based on their own earnings rather than a

**Change in Deficit if Changes in Procedures for Measuring the CPI
Caused it to be Reduced by 1 Percentage Point (By fiscal year, in billions of dollars)**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Change in Revenues	-1.9	-6.0	-10.5	-13.9	-18.9	-24.1	-28.0	-33.0	-38.5	-44.2
Change in Outlays										
Social Security	-2.8	-6.6	-10.7	-14.9	-19.4	-24.0	-28.7	-33.7	-39.0	-44.6
Railroad Retirement	a	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.4	-0.5	-0.6
Supplemental Security Income	-0.2	-0.5	-0.9	-1.0	-1.5	-2.0	-2.5	-3.3	-3.7	-4.0
Civil Service Retirement	-0.3	-0.8	-1.2	-1.7	-2.2	-2.7	-3.3	-3.9	-4.5	-5.1
Military Retirement	-0.2	-0.5	-0.9	-1.2	-1.6	-2.0	-2.4	-2.8	-3.3	-3.8
Veterans' Compensation and Pensions	-0.1	-0.3	-0.6	-0.7	-1.0	-1.2	-1.5	-1.8	-2.0	-2.0
Earned Income Credit	a	-0.5	-1.2	-1.9	-2.5	-3.3	-4.1	-4.8	-5.7	-6.6
Other ^b	a	a	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
Offsets ^c	a	0.2	0.5	0.7	1.0	1.3	1.7	2.1	2.4	2.9
Subtotal	-3.7	-9.2	-15.2	-21.1	-27.6	-34.3	-41.2	-48.9	-56.3	-63.9
Debt Service	-0.2	-0.8	-2.0	-3.8	-6.3	-9.7	-13.8	-18.9	-24.9	-32.0
Change in Deficit	-5.8	-16.0	-27.7	-38.8	-52.8	-68.1	-83.0	-100.8	-119.7	-140.1

SOURCE: Congressional Budget Office.

NOTE: Revenue increases are shown with a negative sign because they reduce the deficit.

a. Less than \$500 million.

b. Foreign Service retirement, Public Health Service retirement, Coast Guard retirement, and worker's compensation for federal employees.

c. Food stamps, Medicare, and Medicaid.

smaller, spouse's benefit. In Social Security alone, such phenomena are estimated to add \$5 billion in 1998 and \$56 billion in 2007.

Depending on calendar flukes, Supplemental Security Income, veterans' compensation and pensions, and Medicare (payments to HMOs only) may pay 11, 12, or 13 monthly checks in a fiscal year. See p. 19 for an explanation of timing of payment shifts.

Most of the remaining growth in benefit programs stems from rising benefits for new retirees in the civil service, military, and Railroad Retirement programs (fundamentally the same phenomenon as in Social Security); larger average benefits in unemployment com-

pensation, a program that lacks an explicit COLA provision but pays amounts that are automatically linked to the recent earnings of its beneficiaries; a reduction in net income to bank and thrift insurance funds; and other sources. All of those factors together, however, contribute just \$42 billion of the total \$738 billion increase in mandatory spending between 1997 and 2007.

Offsetting Receipts

Offsetting receipts are income that the government records as negative spending. Those receipts are either intragovernmental (reflecting payments from one part of the federal government to another) or proprietary

Table 2-11.
CBO Projections of Offsetting Receipts (By fiscal year, in billions of dollars)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Employer Share of Employee Retirement												
Social Security	-6	-6	-7	-7	-8	-9	-9	-10	-11	-12	-13	-13
Military Retirement	-11	-11	-11	-11	-11	-11	-11	-11	-12	-12	-12	-12
Other ^a	<u>-16</u>	<u>-16</u>	<u>-17</u>	<u>-17</u>	<u>-18</u>	<u>-18</u>	<u>-19</u>	<u>-20</u>	<u>-21</u>	<u>-22</u>	<u>-23</u>	<u>-20</u>
Subtotal	-34	-34	-34	-35	-36	-38	-40	-41	-43	-45	-47	-46
Medicare Premiums	-20	-20	-21	-22	-23	-24	-26	-27	-28	-29	-31	-32
Energy-Related Receipts ^b	-6	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Natural Resources-Related Receipts ^c	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
Electromagnetic Spectrum Auctions	d	-7	-9	-4	-1	d	0	0	0	0	0	0
Other ^e	<u>-10</u>	<u>-10</u>	<u>-13</u>	<u>-9</u>	<u>-9</u>	<u>-10</u>	<u>-10</u>	<u>-10</u>	<u>-8</u>	<u>-8</u>	<u>-9</u>	<u>-9</u>
Total	-73	-79	-85	-78	-78	-80	-83	-86	-88	-91	-95	-95

SOURCE: Congressional Budget Office.

a. Primarily received by Civil Service Retirement.

b. Includes proceeds from sales of power, various fees, and receipts from the naval petroleum reserves and Outer Continental Shelf.

c. Includes timber and mineral receipts and various user fees.

d. Less than \$500 million.

e. Includes asset sales.

(reflecting voluntary payments from the public in exchange for goods or services).

A decision to collect more (or less) in offsetting receipts usually requires a change in the laws generating such collections. Thus, offsetting receipts resemble mandatory spending and revenues, and are also subject to the pay-as-you-go discipline, rather than discretionary appropriations.

Intrabudgetary transfers that represent agencies' contributions to their employees' retirement plan account for more than 40 percent of offsetting receipts, a share that is expected to grow to nearly 50 percent by 2007 (see Table 2-11). Those contributions are paid primarily to the trust funds for Social Security, Hospital Insurance, Military Retirement, and Civil Service Retirement. Some contribution rates are set by statute; others are determined by actuaries. Agencies are required to pay for the retirement contributions of their employees in much the same way that they pay for other elements of their employees' compensation. Future retirement benefits are an important part of current compensation for the government's 4.3 million military, civilian, and postal employees. The budget treats those retirement contributions as part of agency budgets and handles the deposits in retirement funds as offsetting receipts. Those transfers thus wash out in the budgetary totals, leaving only the funds' disbursements—for retirement benefits and administrative costs—reflected in total outlays.

The largest proprietary receipt that the government collects is made up of premiums from the 36 million people who enroll in Supplementary Medical Insurance (SMI, or Part B of Medicare), which primarily covers physician and outpatient services. Premium collections from the elderly and disabled are estimated to grow from \$20 billion in 1997 to \$32 billion in 2007, as the monthly charge climbs from \$43.80 to \$59.70. Premiums are set to cover one-quarter of the costs of SMI through 1998. After 1998, premiums will increase at the same rate as the cost-of-living adjustment provided to Social Security beneficiaries, and the share of costs paid by beneficiaries will fall.

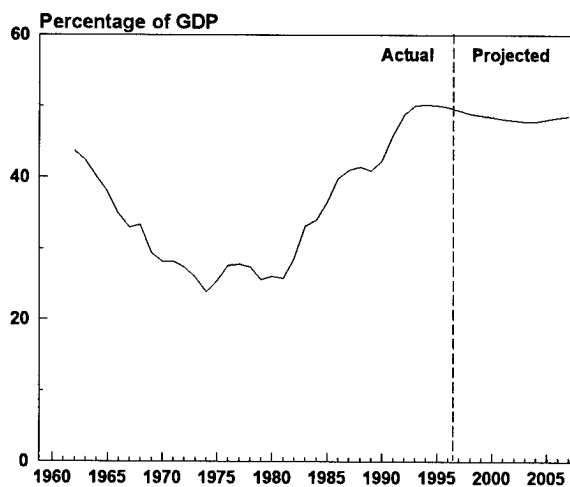
Other proprietary receipts come mostly from charges for energy, minerals, and timber and from various fees levied on users of government property or services. A relatively new entry—receipts from the Fed-

eral Communications Commission's auction of portions of the electromagnetic spectrum for use by telecommunications companies—is expected to bring in \$7 billion in 1997, \$9 billion in 1998, and another \$5 billion thereafter. Those receipts, which can be paid over time, are recorded on a net present-value basis pursuant to the Credit Reform Act of 1990.

Net Interest

Interest costs are a significant portion of the federal budget, currently representing 15 percent of all federal outlays. Under CBO's assumption of stable interest rates throughout the projection period and assuming that discretionary spending rises with inflation, interest payments will decline to 13 percent of the budget by 2007. In dollar terms, net interest will rise from \$241 billion in 1996 and increase steadily to an expected level of \$340 billion in 2007. Debt held by the public is projected to rise during that period from \$3.7 trillion to \$6 trillion (see Table 2-12). As a percentage of GDP, interest costs are expected to decline slowly from 3.2 percent this year to 2.7 percent in 2007, and debt held by the public will stabilize at about 48 percent of GDP (see Figure 2-6).

Figure 2-6.
Debt Held by the Public as a Percentage of GDP



SOURCE: Congressional Budget Office.

Table 2-12.
CBO Baseline Projections of Federal Debt and Interest Costs (By fiscal year)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Net Interest Outlays (Billions of dollars)												
Interest on Public Debt (Gross interest) ^a	344	360	368	380	389	399	412	426	442	458	475	493
Interest Received by Trust Funds												
Social Security	-37	-43	-48	-53	-58	-63	-69	-76	-82	-89	-96	-104
Other trust funds ^b	-62	-62	-61	-60	-59	-58	-56	-54	-51	-48	-43	-38
Subtotal	-98	-106	-109	-113	-117	-121	-125	-129	-133	-137	-139	-142
Other Interest ^c	-5	-6	-6	-6	-6	-6	-7	-8	-8	-10	-10	-11
Total, Net Interest Outlays	241	248	253	261	267	272	279	289	300	312	325	340
Federal Debt, End of Year (Billions of dollars)												
Gross Federal Debt	5,182	5,436	5,688	5,960	6,249	6,532	6,830	7,135	7,447	7,778	8,113	8,454
Debt Held by Government Accounts												
Social Security	550	628	709	796	891	989	1,093	1,202	1,316	1,435	1,562	1,694
Other government accounts ^b	899	940	969	991	1,000	1,004	997	978	947	895	828	748
Subtotal	1,449	1,567	1,678	1,787	1,891	1,993	2,090	2,180	2,263	2,331	2,390	2,442
Debt Held by the Public	3,733	3,869	4,009	4,173	4,358	4,539	4,740	4,954	5,184	5,448	5,723	6,011
Debt Subject to Limit ^d	5,137	5,392	5,643	5,915	6,205	6,487	6,785	7,090	7,402	7,734	8,069	8,409
Federal Debt as a Percentage of GDP												
Debt Held by the Public	49.9	49.4	49.0	48.7	48.5	48.2	48.0	47.9	47.9	48.1	48.4	48.6

SOURCE: Congressional Budget Office.

- a. Excludes interest costs of debt issued by agencies other than Treasury (primarily the Tennessee Valley Authority).
- b. Principally Civil Service Retirement, Military Retirement, Medicare, unemployment insurance, and the Highway and the Airport and Airway Trust Funds.
- c. Primarily interest on loans to the public.
- d. Differs from the gross federal debt primarily because most debt issued by agencies other than the Treasury is excluded from the debt limit.

Interest costs are generally not covered by the enforcement provisions of the Budget Enforcement Act because they are not directly controllable. Rather, interest depends on the outstanding amount of government debt and on interest rates. The Congress and the President influence the former by making decisions about taxes and spending and thus about borrowing. Beyond that, they exert no direct control over interest rates, which are determined by market forces and Federal Reserve policy.

Interest rates have a powerful effect on budget projections (see Appendix D). If interest rates are 1 percentage point higher than CBO assumes in the period from 1997 through 2007, net interest costs will be greater by about \$6 billion in 1997 and \$88 billion in 2007. The extra costs stem from the huge volume of new financing and the rollover of existing debt by the Treasury.

Net or Gross? Net interest is the most useful measure of the government's current debt-service costs. Some budget-watchers stress gross interest (and its counterpart, the gross federal debt) instead of net interest (and its counterpart, debt held by the public). But that choice exaggerates the government's debt-service burden because it overlooks billions of dollars in interest income received by the government.

The government has sold more than \$3.7 trillion in securities to finance deficits over the years. But it has also issued \$1.4 trillion in securities to its own trust funds (mainly Social Security and the other retirement funds). Those securities represent the past surpluses of the trust funds, and their total amount grows approximately in step with the projected trust fund surpluses (see next section). The funds redeem the securities when needed to pay benefits; in the meantime, the government both pays and collects the interest on those securities. It also receives interest income from loans and cash balances. Broadly speaking, gross interest encompasses all interest paid by government (even to its own funds) and ignores all interest income. Net interest, by contrast, is the net flow to people and organizations outside the federal government.

Net interest is only about two-thirds as large as gross interest. CBO estimates that the government will pay \$360 billion in gross interest costs this year. Of that amount, however, \$106 billion is simply credited to

trust funds and does not leave the government or add to the total deficit. The government also collects \$6 billion in other interest income. Net interest costs therefore total \$248 billion.

Debt Subject to Limit. The Congress sets a limit on the Treasury's authority to issue debt. That ceiling applies to securities issued to federal trust funds as well as those sold to the public. Debt subject to limit is practically identical to the gross federal debt and is widely cited as the measure of the government's indebtedness. (The minor differences between gross debt and debt subject to limit are chiefly attributable to securities issued by agencies other than the Treasury, such as the Tennessee Valley Authority, that are exempt from the debt limit.) In March 1996, the Congress raised the debt ceiling to \$5.5 trillion, which should be adequate into 1998.

Federal Funds and Trust Funds

There are more than 150 federal government trust funds, although fewer than a dozen account for the vast share of trust fund dollars. Among the largest are the two Social Security trust funds along with those dedicated to Civil Service Retirement, Hospital Insurance, and Military Retirement. As currently treated in the budget, trust funds have no particular economic significance—they are simply designated as such by law and used as accounting mechanisms to track federal spending and receipts for individual programs.

The trust fund technique involves earmarking specific taxes or other revenues for financing certain programs. That procedure helps to weigh the costs and benefits of the programs and gives beneficiaries some assurance that their benefits will be protected. For certain programs, such as federal military and civilian retirement, the trust fund approach also allows agency spending to reflect accrued costs, even though the budget totals record spending on a cash basis. The two Social Security trust funds have been designated by law as off-budget.

Assuring the financial soundness of the trust funds requires that their receipts and expenditures be tracked

separately from those of other programs. Thus, the principal significance of trust funds lies in an analysis of receipts and expenditures of the individual funds rather than in the totals for all trust funds combined or the totals for federal funds excluding trust funds. The trust funds must be included in the budget totals with other programs when considering the effect of federal activities on national income and employment and on the Treasury's cash borrowing needs. The Congressional Budget Office, the Office of Management and Budget, and other fiscal analysts therefore focus on a

comprehensive measure of the federal budget, including the trust funds.

Viewed by themselves, trust funds run surpluses because their earmarked income (chiefly from social insurance taxes and transfers within the budget) exceeds spending for benefits, administration, and other activities. The total trust fund surplus is expected to be \$109 billion in 1997 and remain at essentially that level for the next few years (see Table 2-13). Eventually, the rapidly depleting Hospital Insurance trust fund will

Table 2-13.
Trust Fund Surpluses in the CBO December 1996 Baseline (By fiscal year, in billions of dollars)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Social Security	66	78	81	88	94	98	104	109	114	120	127	132
Medicare												
Hospital Insurance	-4	-10	-18	-25	-36	-41	-54	-67	-81	-103	-117	-130
Supplementary Medical Insurance	13	-5	2	3	3	1	3	3	4	5	4	4
Subtotal	9	-15	-16	-23	-33	-39	-51	-64	-78	-98	-113	-126
Military Retirement	5	9	9	9	9	10	10	11	12	13	13	14
Civilian Retirement ^a	28	28	28	28	28	29	29	29	30	29	29	28
Unemployment	6	7	6	3	3	2	3	3	3	3	3	3
Highway	3	3	3	4	4	5	5	5	5	5	5	5
Airport and Airways	-3	-4	-6	-6	-6	-7	-7	-8	-9	-10	-10	-11
Other ^b	1	3	3	3	4	3	3	3	3	3	3	3
Total Trust Fund Surplus ^c	115	109	109	106	102	101	96	88	80	65	57	49
Federal Funds Deficit ^c	-222	-233	-229	-254	-274	-268	-284	-290	-299	-319	-322	-327
Total Deficit	-107	-124	-120	-147	-171	-167	-188	-202	-219	-254	-266	-278
Memorandum:												
Net Transfers from Federal Funds to Trust Funds	240	235	253	268	285	296	317	335	355	381	399	414

SOURCE: Congressional Budget Office.

- a. Civil Service Retirement, Foreign Service Retirement, and several smaller funds.
- b. Primarily Railroad Retirement, employees' health and life insurance, Hazardous Substance Superfund, and various veterans' insurance trust funds.
- c. Assumes that discretionary spending reductions are made in non-trust-fund programs.

cause the size of the overall trust fund surplus to decline, dwindling to \$49 billion in 2007. Without any changes in current policies, the holdings of the HI trust fund will continue to fall, ending up \$556 billion in the hole by the end of 2007.

One other major trust fund, Airport and Airways, is expected to run out of money in the near future. As part of the Small Business Job Protection Act of 1996 that was passed in August, expired airline ticket and other aviation-related taxes were only reinstated through December 1996. If that source of revenue is not reinstated or replaced, the trust fund will be completely depleted during fiscal year 1998.

As for other trust funds, the second Medicare program—Supplementary Medical Insurance—runs a small surplus or deficit every year by design. SMI gets roughly one-fourth of its income from enrollee premiums and taps the general fund of the government for the rest of its \$70 billion-plus outlays, generally permitting a small surplus. Apart from Social Security and Medicare, trust fund surpluses run about \$40 billion a year and are concentrated in the unemployment insurance and federal employee retirement programs.

In 1997, the total deficit is expected to be \$124 billion. That can be divided into a federal funds deficit of \$233 billion offset by a trust fund surplus of \$109 billion. The line between federal funds and trust funds

is not so neat, however, because trust funds receive a large portion of their income from transfers within the budget. Such transfers shift money from the general fund (thereby boosting the federal funds deficit) to trust funds (thus swelling the trust fund surplus). Those intragovernmental transfers will total more than \$230 billion in 1997. Prominent among them are interest paid to trust funds (\$106 billion in 1997), government contributions to retirement funds on behalf of present and past federal employees (\$66 billion), and contributions by the general fund to Medicare, principally SMI (\$54 billion). Clearly, each of those transfers was instituted for a purpose—for example, to force agencies to reflect the cost of funding future retirement benefits in weighing their hiring decisions. But it is equally clear that transferring money from one part of the government to another does not change the total deficit or the government's borrowing needs. Without those intragovernmental transfers, the trust funds would have an overall deficit every year, ranging from about \$125 billion in 1997 to \$350 billion in 2007.

Large current surpluses in retirement trust funds can present a misleading picture of the long-run health of the programs. For example, although the Social Security trust funds are currently running surpluses, combined expenditures will exceed tax income beginning in 2012. By 2029, the Social Security board of trustees projects that the funds will be exhausted.

Uncertainty in Budget Projections

The baseline projections in Chapters 1 and 2 represent the Congressional Budget Office's (CBO's) estimates of the most likely economic and budget paths if current policies are not changed. However, considerable uncertainty surrounds those estimates because the U.S. economy and the federal budget are highly complex and are affected by many factors, none of which can be projected with full confidence. If policymakers are committed to achieving a specific budget outcome in a particular year—for instance, balancing the budget in fiscal year 2002—they need to understand how projection errors might affect their ability to achieve that outcome.

This chapter examines a series of alternative assumptions about the economy and the effect those alternatives would have on budgetary outcomes. It also suggests how various factors other than the performance of the economy could significantly alter those outcomes.

The analysis of alternative economic assumptions reveals that the budget deficit is quite sensitive to different assumed paths for the economy. Growth in potential gross domestic product (GDP) that was half a percentage point higher or lower would decrease or raise the deficit by \$50 billion in fiscal year 2002. Those effects would continue to grow over time. Similarly, a fairly typical swing in the business cycle would increase or decrease the deficit by more than \$100 billion in a given year. In contrast to a shift in the growth of potential output, the effect of the business cycle on the budget would largely fade away over time.

Noneconomic factors could cause actual deficits to deviate from CBO's baseline projections by amounts

equaling or exceeding the effects of the alternative economic paths. For example, an increase of 2 percentage points in the annual rate of growth of Medicare and Medicaid alone could boost spending for those two programs by about \$50 billion in fiscal year 2002. If such technical errors (those not attributed to the performance of the economy or legislation) pushed the deficit in the same direction as economic errors in a particular fiscal year, the deficit could swing by very large amounts. Of course, if technical and economic errors in a fiscal year were offsetting, their impact on the deficit would be diminished, or even eliminated.

The Budgetary Impact of Alternative Economic Assumptions

CBO currently projects a budget deficit of \$188 billion in fiscal year 2002 under current laws, assuming that discretionary spending keeps pace with inflation. Assumptions about real GDP growth, inflation, short- and long-term interest rates, income shares (wages and corporate profits expressed as a percentage of GDP), and the unemployment rate have a large influence on projections. If the economy differs from its assumed path, the budget deficit in fiscal year 2002 will probably differ from its projected value. This section examines how alternative assumptions about the economy would affect projections of the budget deficit for the next 10 years. Any departure from the baseline economic assumptions will generate errors in the budget projections. Errors in

addition to those from noneconomic sources may offset or exacerbate the impact of the economic errors.

CBO has examined two broad sets of alternative economic assumptions. The first set looks at differences in the economy's long-run rate of growth. It assumes that CBO's projection for the economy relative to potential output (the level of output that would prevail at full employment) is correct but that the projection for potential output is not. In this set, interest rates, inflation, income shares, and the unemployment rate do not differ from baseline values, but growth in potential output does.

The second set looks at the effect of cyclical disturbances in the economy. It assumes that CBO's projection for potential output is correct but that the projection for the economy relative to potential output is not. Output deviates more from CBO's baseline projection of potential than it does in the baseline projection discussed in Chapter 1. Interest rates, inflation, income shares, and the unemployment rate also follow different paths.

These alternative assumptions are constructed to roughly mimic historical patterns. However, the pattern of economic fluctuations rarely, if ever, repeats itself. The factors contributing to each upswing and subsequent downswing in the economy vary with each episode. In fact, it is the uniqueness of each episode that makes turning points in the business cycle so difficult to predict. Thus, although one can safely say that the economy will experience business cycles in the future, it is impossible to predict their exact timing or their detailed causes.

CBO has estimated the effect that these alternative economic assumptions would have on its baseline projections if all other baseline assumptions remained the same. The first set of assumptions examines the budgetary impact of higher and lower long-run economic growth. Higher long-run economic growth results in significantly lower budget deficits, and lower long-run economic growth results in significantly higher budget deficits. The second set of assumptions examines the budgetary impact of two different types of cyclical disturbances: an optimistic business cycle (a prolonged expansion followed by a mild recession) temporarily reduces the deficit; and a pessimistic business cycle (a

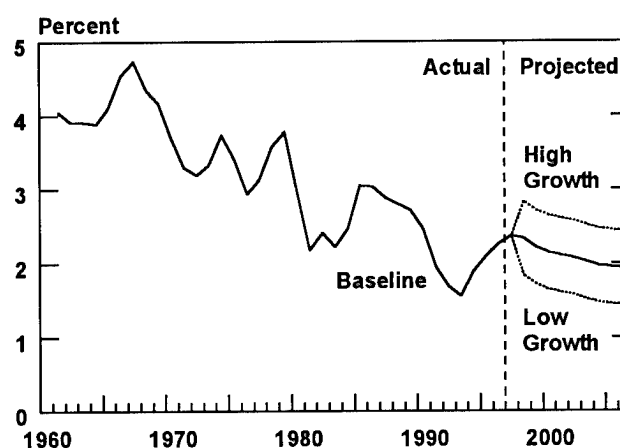
brief boom followed by a recession of average size) temporarily increases the deficit.

Effect of Differences in the Long-Run Rate of Economic Growth

In Chapter 1, CBO presented its projection of both potential output and numerous economic variables such as inflation, unemployment, and interest rates. This section discusses the impact of changes in potential output on the budget deficit when the relationship between the other variables and potential is the same as in the baseline. Two alternatives, one in which growth in potential output is 0.5 percentage points faster than baseline potential and one in which growth is that much slower, are examined (see Figure 3-1).

The growth rate of potential output has varied substantially over the past 30 years, as have the two main factors that drive its growth: growth in the labor force and in output per hour. Average annual growth of po-

Figure 3-1.
Alternative Growth Rates of Potential GDP
(By calendar year)



SOURCE: Congressional Budget Office.

NOTE: Relative to the baseline, annual growth of potential output is 0.5 percentage points faster in the high-growth alternative and 0.5 percentage points slower in the low-growth alternative.

tential output has ranged from a high of 3.9 percent (1960-1973) to a low of 1.9 percent (1990-1996), as was shown in Table 1-4. In the CBO baseline, potential output grows at an average annual rate of 2.1 percent from 1996 to 2007. An increase or decrease of 0.5 percentage points in that growth would not be inconsistent with past trends.

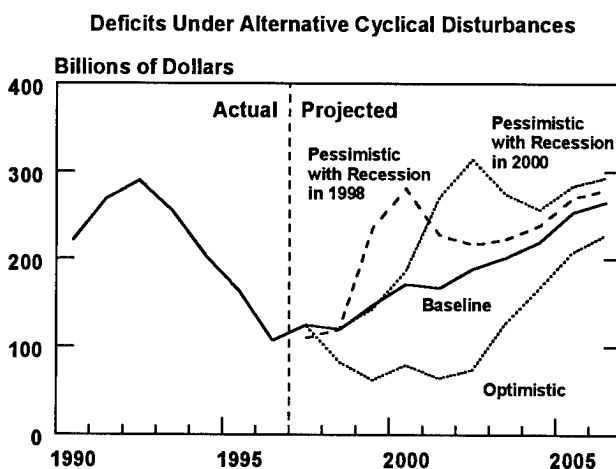
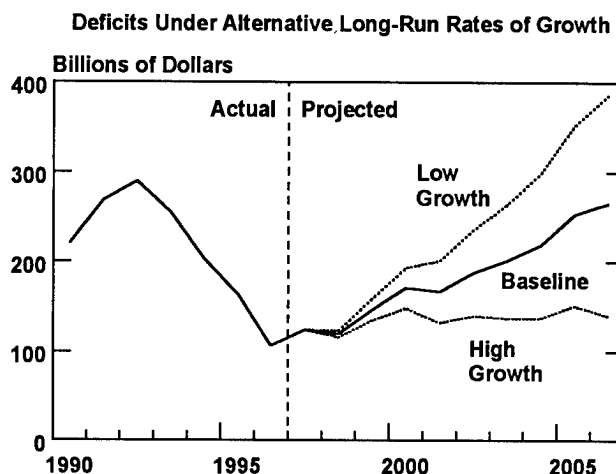
In the high-growth alternative, potential output would grow at 2.6 percent instead of 2.1 percent. The resulting higher level of economic activity and income would produce significantly higher revenues. The revenue bonus would reduce the amount the federal government needed to borrow, thus cutting federal interest costs. The deficit would be about \$50 billion smaller than the baseline deficit by fiscal year 2002 and about \$150 billion smaller by 2007 (see Figure 3-2). The low-growth alternative (potential output grows at an average annual rate of only 1.6 percent) would have a more or less equal but opposite effect on the deficit.

Effect of Cyclical Disturbances

CBO's economic projections for 1999 to 2007 represent the expected average behavior of the economy. As a result, the projected path of the economy is much smoother than the actual history. For example, the economy rarely grows as smoothly as potential GDP (see Figure 3-3). Most of the time, real GDP is either above potential (most notably, as it was for the latter half of the 1960s) or below potential (as it was during the recessions of the early 1970s and early 1980s). The fact that real GDP has fluctuated around its potential in the past suggests that it will continue to do so.

Predicting the exact size and timing of these fluctuations is impossible. However, some broad inferences about the kind of fluctuations can be drawn from the experience of the economy. In the late 1960s, for example, the economy spent a considerable period growing above potential. That experience is reflected in the first, or optimistic, alternative. At the end of the boom in that alternative, the economy enters a mild recession similar to the one in 1970. (The experience of the late 1960s is highly unusual, and repeating it in every detail would require that the Federal Reserve respond weakly to the prospect of higher inflation. CBO

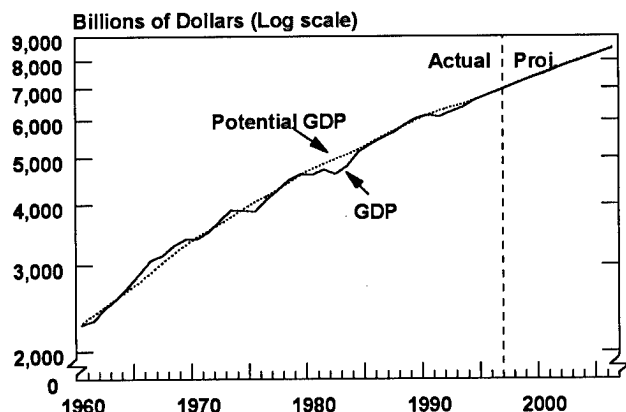
Figure 3-2.
Deficits Under Alternative Economic Assumptions
(By fiscal year)



SOURCES: Congressional Budget Office; *Budget of the United States Government, Fiscal Year 1997: Historical Tables*.

NOTES: Relative to the baseline, annual growth of potential output is 0.5 percentage points faster in the high-growth alternative and 0.5 percentage points slower in the low-growth alternative. In the optimistic alternative, the economy rises above potential through 2002, experiences a mild recession, and returns to baseline in 2003. In the pessimistic alternative with a recession in 1998, the economy rises above potential through the first half of 1998, enters a recession in the third quarter of 1998, and returns to baseline in 2002. In the pessimistic alternative with a recession in 2000, the economy rises above potential through the first half of 2000, enters a recession in the third quarter of 2000, and returns to baseline in 2004.

Figure 3-3.
GDP and Potential GDP (By calendar year)



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

has therefore chosen to model a fluctuation that is only half as big as occurred in the late 1960s.) Under the optimistic alternative, the budget deficit would fall more than \$100 billion below the baseline projection in fiscal year 2002, but the beneficial budgetary effects would largely disappear by 2007.

The pessimistic alternative assumes that the economy experiences a recession roughly the size of the 1990 recession sometime during the projection period. Because the timing of such a recession is crucial to its budgetary impact in a particular year, CBO produced two sets of deficit projections under this alternative. The first, which assumes that the recession occurs early in the projection period, would have a relatively small effect on the deficit in fiscal year 2002. The second, which assumes that the recession occurs close to 2002, would have deficits in that year that were more than \$100 billion higher than CBO's baseline projections. In both cases, as with the optimistic alternative, the effects on the deficit would largely fade away by fiscal year 2007.

Optimistic Alternative. According to the CBO baseline, the projected level of real GDP will be 0.1 percent above potential for 1997 and then will fall to 0.3 percent below potential for the period 1998 through 2002. Alternatively, the economy may rise above potential

through 2002 and then experience a mild recession in 2003, bringing it back to the baseline path (see Figure 3-4).

The change in the unemployment rate for this alternative would mirror the change in real GDP. The unemployment rate would fall 0.7 percentage points from the baseline of 5.3 percent in 1997 to 4.6 percent in 2002. In 2003, it would rise to 5.3 percent as the economy entered a recession.

The sustained increase in GDP above potential would provoke increases in both inflation and interest rates (see Figure 3-4). Inflation would rise from 2.9 percent in 1997 to 4.5 percent in 2002 and 4.7 percent in 2007. At its peak in 2007, inflation would be 1.6 percentage points above the baseline. Given the current policies of the Federal Reserve, such an increase would probably provoke a vigorous reaction, but in the late 1960s the reaction was muted. In this alternative, which follows the experience of the late 1960s, short-term interest rates would rise 1.5 percentage points from 1997 to 2002, fall slightly in 2003 and 2004, and then continue a gentle rise through 2007. Long-term interest rates would follow a similar pattern, reaching 1.6 percentage points above the baseline in 2007.

Another important determinant of the budget deficit is the share of GDP accounted for by wages and corporate profits which, taken together, produce the bulk of revenue. That share tends to rise when the economy grows above potential (reducing the deficit) and fall when the economy enters a recession (increasing the deficit). As a result of the sustained boom described in this alternative, the share of wages and corporate profits would remain at 56.4 percent instead of falling to 54.8 percent by 2002 as assumed in the baseline (see Figure 3-4).

Higher growth of real GDP, lower unemployment, and a greater percentage of income paid in wages and corporate profits would result in a projected deficit that was more than \$100 billion lower in fiscal year 2002 than was assumed in the baseline. Revenues would increase substantially as a result of the increase in real economic activity. Spending for unemployment insurance and other benefits that are sensitive to unemployment would also drop, although the largest effect on the outlay side of the budget would be the impact of the increased revenues on the amount of interest paid on

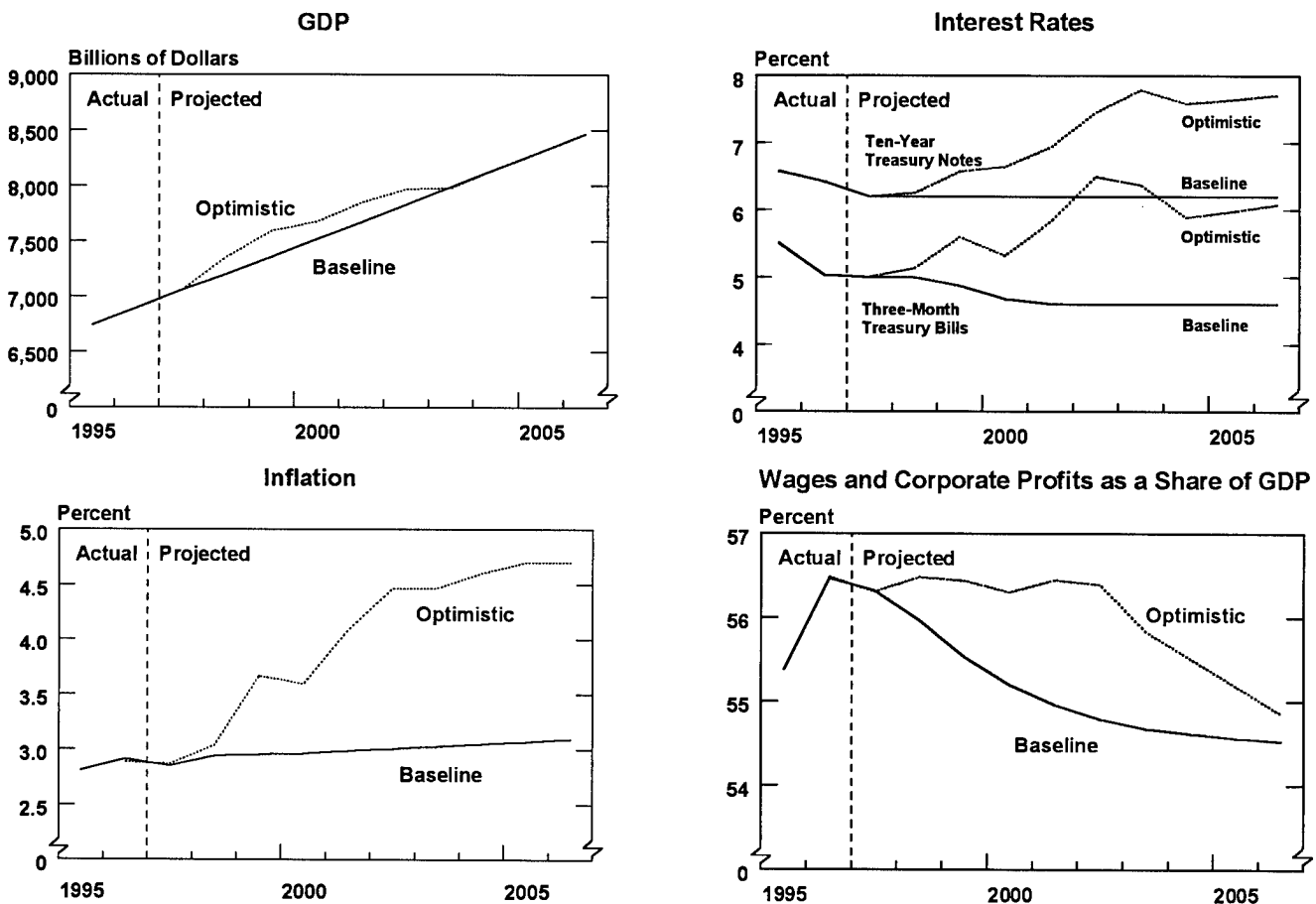
the debt. The higher inflation assumed in this alternative would push up both revenues and outlays, but the inflation-related effects would essentially offset each other as far as the deficit is concerned.

After fiscal year 2002, the deficit would move back toward the baseline as the result of two factors. First, as the economy entered a recession in 2002, revenues would decline and outlays would increase. Second, beyond 2002, the income shares would be assumed to revert back to their baseline paths. Thus, the share of wages and corporate profits in GDP would fall from 56.4 percent in 2002 to 54.5 percent in 2007. The economy would return to the levels assumed in the baseline, but the deficit would probably remain a little

lower; lower deficits and borrowing in preceding years would reduce federal debt and federal interest payments in fiscal year 2007.

Pessimistic Alternative. Since 1970, the economy has spent much more time below potential than above it. Currently, as stated in Chapter 1, there is little sign of a recession. However, excessive growth would probably cause the Federal Reserve to raise interest rates much more than it did in the late 1960s, and that action could precipitate a recession. Suppose, therefore, that the economy rose above potential and then entered a recession roughly the size of the 1990 recession. The increase in output would cause the inflation rate to rise 1.2 percentage points and the unemployment rate to fall

Figure 3-4.
Optimistic Alternative (By calendar year)



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

NOTE: In the optimistic alternative, the economy rises above potential through 2002, experiences a mild recession, and returns to baseline in 2003.

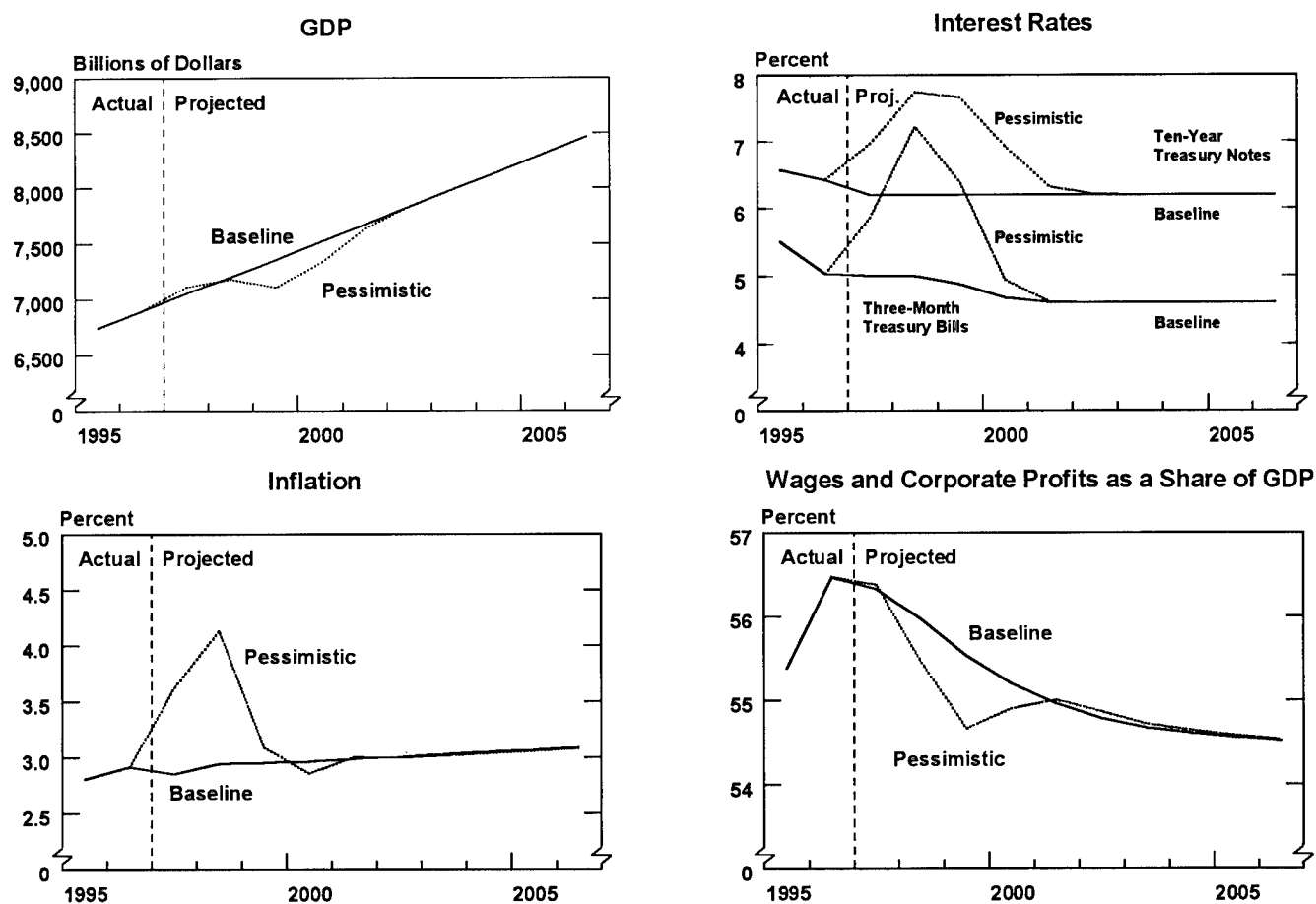
0.3 percentage points. During the boom, short- and long-term interest rates would rise 2.2 percentage points and 1.3 percentage points, respectively. As the economy entered the recession, inflation and interest rates would return to their baseline levels, and the unemployment rate would rise 2 percentage points. At the trough of the recession, the level of output would be 3.7 percent below potential, and the share of GDP accounted for by wages and corporate profits would be 0.87 percentage points below the baseline.

Such an alternative is not implausible. Data Resources, Inc., a firm that regularly provides forecasts

for the private sector, subjectively estimates a 35 percent chance of a recession occurring in 1999. Moreover, approximately 60 percent of the 50 private-sector forecasters surveyed by *Blue Chip* feel that the economy will enter a recession before the end of 1998.

The timing of such an alternative is quite uncertain, and its effects would vary depending on whether the recession began early or late. If this alternative started in 1997, the economy would experience its mild boom in 1997 and the first half of 1998, enter the recession in the third quarter of 1998, and recover fully by 2002 (see Figure 3-5). With that starting date, inflation and

Figure 3-5.
Pessimistic Alternative with a Recession in 1998 (By calendar year)



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

NOTE: In the pessimistic alternative with a recession in 1998, the economy rises above potential through the first half of 1998, enters a recession in the third quarter of 1998, and returns to baseline in 2002.

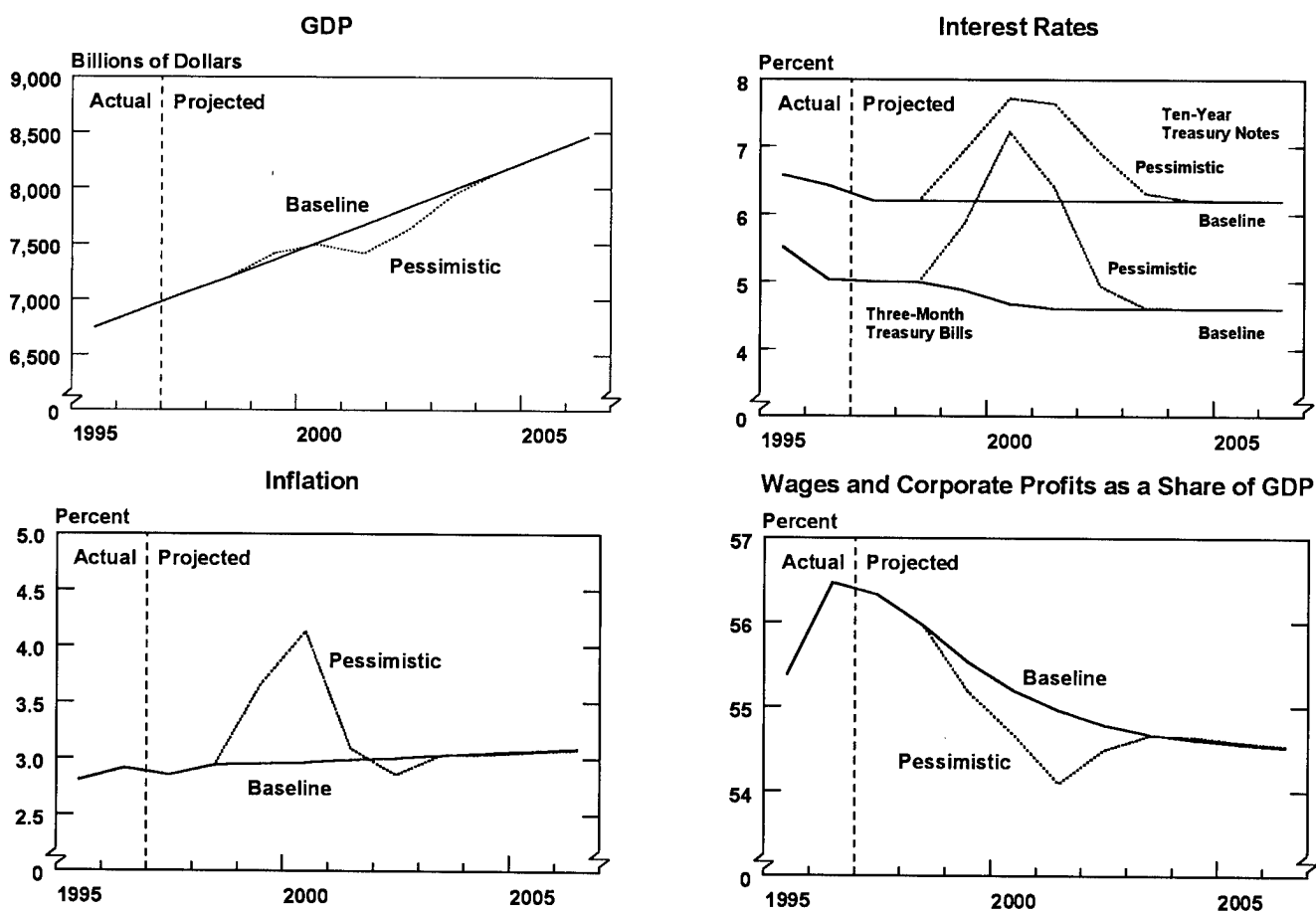
interest rates would peak in 1998. The share of wages and corporate profits would decline to a low of 54.6 percent in 1999 and then return to its baseline value by 2002.

As expected, the budget deficit would increase as the economy entered the recession and decline as the economy recovered. The reduction in real economic activity during the recession would significantly diminish revenues. It would also increase federal spending—by a far smaller amount—for unemployment insurance and other benefits. As under the optimistic alternative, higher inflation (in this case occurring before the recession)

would push up both revenues and outlays, but the effect on the deficit would be essentially neutral. Even though the economy would fully recover from the recession by 2002, the budget deficit would still be about \$30 billion above the baseline in that fiscal year. The deficit would probably remain slightly above the baseline through fiscal year 2007 because of the higher level of debt accumulated during the downturn.

If the boom and recession started two years later, in 1999, the economy would rise slightly above potential through the first half of 2000 and then enter a recession in the third quarter of 2000 (see Figure 3-6). The

Figure 3-6.
Pessimistic Alternative with a Recession in 2000 (By calendar year)



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

NOTE: In the pessimistic alternative with a recession in 2000, the economy rises above potential through the first half of 2000, enters a recession in the third quarter of 2000, and returns to baseline in 2004.

trough of the recession would occur in 2001, with the level of real GDP falling to 3.7 percent below potential. Interest rates and inflation would peak in 2000 and then return to baseline values by 2004. The share of wages and corporate profits would decline to a low of 54.1 percent in 2001 and then return to its baseline value by 2004. The maximum adverse impact on the deficit would occur in fiscal year 2002, with the deficit climbing more than \$100 billion above the level projected in the baseline.

Thus far, the effects that the two sets of alternative economic assumptions would have on the deficit have been examined separately. The first set looked at the impact of different projections of potential output, keeping all other variables at their baseline values. The second set looked at the impact of cyclical disturbances in the economy, keeping potential at its baseline value. In reality, however, the economy may experience both types of departures from the baseline. In fact, cyclical disturbances typically alter the long-term growth rate of the economy. In the optimistic alternative, for example, if investment followed its historical pattern during expansions, it would rise well above the baseline in 1998 through 2002. That higher level of investment would boost the level of potential output by 2002, implying a larger reduction in the deficit than is illustrated in Figure 3-2. Similarly, in the pessimistic alternative with the recession beginning in 1998, the level of potential would be lower in 2002, implying a larger increase in the deficit than is illustrated in Figure 3-2.

Other Factors That May Affect Budgetary Outcomes

Actual budgetary outcomes may also deviate from CBO's baseline projections for a host of reasons that are not related to the performance of the economy. One reason, of course, is the enactment of legislation. But those deviations are exactly what the Congress and the President aim to produce in order to eliminate the deficit. In planning changes in budgetary policy, however, policymakers should keep in mind that numerous other, technical factors may cause federal spending and revenues to turn out differently than projected.

For example, the rate of growth of spending for Medicare and Medicaid over the next 10 years will have a tremendous effect on the deficit; the two programs together cost more than \$260 billion in fiscal year 1996. CBO's baseline assumes that combined Medicare and Medicaid spending will increase at an average annual rate of just over 8 percent. But spending for the two programs might instead grow 2 percentage points a year faster, which would still leave their growth a little below the average for the past 10 years. CBO estimates that such an increase in the rate of growth would boost spending for the two programs by about \$50 billion in fiscal year 2002 and by almost \$150 billion in 2007. Given the uncertainty about the future path of spending for those programs, the rate of growth might even be 2 percentage points lower. That would reduce spending by a little less than \$50 billion in fiscal year 2002 and by about \$120 billion in 2007.

A different sort of possible change in outcomes is illustrated by what happened to net spending for deposit insurance in fiscal year 1996. In its January 1991 baseline projections, CBO estimated that federal deposit insurance agencies would take in \$42 billion more in offsetting receipts than they would spend in 1996. That estimate flowed from CBO's assumption that the magnitude of bank and thrift failures before 1996 would lead to substantial proceeds in 1996 from the sale of assets acquired by the federal government as a result of those failures. In fact, however, the extent of the failures was lower than anticipated, reducing the value of assets acquired and the proceeds from their sale. As a result, net deposit insurance receipts totaled only about \$8 billion in 1996.

Many of the noneconomic factors that are most likely to alter the course of federal spending and revenues over the next 10 years cannot even be identified now. For example, who could have imagined in 1981 that deposit insurance spending would total \$66 billion in fiscal year 1991? CBO has therefore not attempted to develop alternative assumptions that reflect the range of possible effects. History, and the size of the effects of different rates of growth for Medicare and Medicaid, suggest that noneconomic factors could easily swing the deficit by amounts that equal or exceed the shifts produced by the alternative economic assumptions. They also suggest that the size of the potential swings can be expected to grow as the projections extend farther into the future.

Conclusion

The alternative economic assumptions and illustrations of technical errors indicate the risks of counting on a particular budget deficit for some year in the future. The optimistic economic path results in a budget deficit that is more than \$100 billion below the baseline in fiscal year 2002. The pessimistic path with a recession starting in 2000 results in a budget deficit that is more than \$100 billion higher than the baseline in fiscal year 2002. Although it is impossible to tell which one of those (or the many other possible) economic alternatives is most likely to occur over the projection period, the economy will certainly fluctuate between now and 2002. Further, a combination of technical errors and errors in projecting the trend and the cycle could lead to a departure from the baseline deficit that far exceeds

\$100 billion; those errors could all go in the same direction in a given year, or they could offset each other.

The high probability of an error complicates budget planning. However, one should keep in mind the consequences of an error. If the projected budget outlook proved to be overly pessimistic, the deficit would be reduced by more than was intended, possibly resulting in a surplus. A surplus, however, could be used to help reduce the debt, which in recent years has been close to 50 percent of GDP, thereby reducing future debt-service costs and budget outlays. Furthermore, a surplus would add to national saving. If the projected outcome was overly optimistic, however, the result would be larger deficits than intended, putting an additional burden on future budget planning. Given the degree of uncertainty, a cautious approach is best when preparing a budget outlook.

Economic and Budgetary Implications of Balancing the Budget

Policy changes that would significantly reduce the size of the budget deficit can be expected to have an impact on the larger economy, lowering interest rates and stimulating economic growth. Those economic changes will in turn boost revenues, reduce outlays, and ultimately reduce the size of the budget deficit by more than the amount of the policy changes. The extra measure of deficit reduction induced by those economic feedbacks is called the fiscal dividend. To help legislators and the public assess more realistically the magnitude of the policy changes needed to attain a particular amount of deficit reduction, the Congressional Budget Office (CBO) has prepared economic and budgetary projections that incorporate those dynamic feedback effects. The projections shown in this chapter refer specifically to the deficit reduction that would result from balancing the budget in 2002 and maintaining that balance in subsequent years.

The baseline estimates presented in Chapter 2 overstate the magnitude of the policy changes that will be necessary to achieve budgetary balance. They do not include the budgetary impact of the improved macroeconomic conditions that are expected to accompany legislative actions to reduce the deficit—that is, they do not include a fiscal dividend. The projections presented in this chapter explicitly include a fiscal dividend by estimating the effect of current budgetary policies under economic projections that assume a balanced budget in 2002. Although those budgetary and economic assumptions are not consistent, combining them is a useful way to understand the effect that a course of action

leading to a balanced budget in 2002 can be expected to have.

In order to estimate the effect of unspecified policies to balance the budget, CBO must assume a path of deficit reduction. The path CBO has chosen, shown in Table 4-1, is broadly consistent both with the plans advanced by the President and the Congress during the 104th Congress and with deficit reduction programs enacted in 1990 and 1993. In CBO's assumed path, policy changes reduce the deficit by \$15 billion in 1998, a sum that increases sharply in 1999 and 2000 and climbs more slowly thereafter to reach \$137 billion by 2002. Reductions in debt service associated with the policy changes augment those savings by as much as \$17 billion by 2002. CBO's deficit reduction path thus assumes that legislation reducing the deficit will have a cumulative effect of almost \$425 billion, which is sufficient to produce a balanced budget when combined with the roughly \$75 billion that CBO currently estimates will accrue as a fiscal dividend between 1997 and 2002.

The Economic Implications of Balancing the Budget

Legislative changes, such as those shown in Table 4-1, would alter the economic outlook in ways that would ease efforts to reduce the deficit. If the budget was

balanced in 2002 and subsequent years, real economic growth would be slightly higher on average over the next 10 years, interest rates would be lower, and corporate profits would be higher (see Table 4-2). Future outlays would be dampened by those economic effects—particularly by the lower interest rates—and revenues would be strengthened. In effect, policies to reduce the deficit would gain an extra boost from the effects that deficit reduction induced in the economy.

CBO's estimates of those economic effects do not assume any specific set of policies to reduce the deficit, even though the types of policies adopted would certainly matter. Deficit reduction that reduced the incentive to work or invest, for example, might have less positive economic effects than those assumed here. Conversely, policies that stimulated growth in the economy's potential output would have more favorable effects.

The current estimates of the macroeconomic effects of balancing the budget are smaller than those CBO estimated in May 1996. Because the projected deficit in 2002 under current policy is about a third smaller than CBO's May projections, the effects of reducing the deficit to zero are correspondingly reduced. In essence, one-third of the previously published fiscal dividend is now incorporated in the baseline economic assumptions described in Chapter 1. In addition, the effect of deficit reduction on interest rates occurs later in CBO's new estimates than in previous estimates (see Table 4-3).

Real Growth

By freeing up savings for use in productive investment, balancing the budget by 2002 and keeping it balanced allows the economy to grow modestly faster. CBO estimates that gross national product, adjusted for inflation

Table 4-1.
Illustrative Path of Deficit Reduction (By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	Total 1997-2002
CBO's Baseline Deficit with Discretionary Inflation	124	120	147	171	167	188	n.a.
Policy Savings							
Illustrative policy changes ^a	0	-15	-49	-75	-110	-137	-387
Debt-service savings	0	b	-2	-6	-10	-17	-36
Subtotal	0	-15	-51	-81	-121	-154	-423
Fiscal Dividend ^c	b	-1	-4	-13	-25	-34	-77
Illustrative Path of Deficit Reduction, with Fiscal Dividend	124	103	92	77	22	0	n.a.

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. These changes represent only one of a large number of possible paths that would lead to a balanced budget. The exact path depends on when deficit reduction begins and the specific policies adopted by the Congress and the President. The path illustrated in this table is not based on any specific policy assumptions.

b. Less than \$500 million.

c. The fiscal dividend is the budgetary effect of improved economic performance that CBO estimates would result from balancing the budget in 2002.

Table 4-2.
Balanced Budget and Baseline Projections of Selected Economic Variables (By calendar year)

	Estimated 1996 ^a	Forecast		Projected								
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Calendar Year Average (Billions of dollars)												
Nominal GDP												
Balanced budget	7,570	7,918	8,282	8,688	9,110	9,550	10,008	10,481	10,972	11,484	12,017	12,573
Baseline	7,570	7,916	8,277	8,678	9,097	9,532	9,984	10,453	10,938	11,443	11,969	12,518
Year over Year (Percentage change)												
Nominal GDP ^b												
Balanced budget	4.4	4.6	4.6	4.9	4.9	4.8	4.8	4.7	4.7	4.7	4.6	4.6
Baseline	4.4	4.6	4.6	4.9	4.8	4.8	4.7	4.7	4.6	4.6	4.6	4.6
Real GDP ^b												
Balanced budget	2.3	2.3	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0
Baseline	2.3	2.3	2.0	2.2	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9
Calendar Year Average (Percent)												
Three-Month Treasury Bill Rate												
Balanced budget	5.0	5.0	5.0	4.6	4.2	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Baseline	5.0	5.0	5.0	4.9	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Ten-Year Treasury Note Rate												
Balanced budget	6.4	6.2	6.1	5.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Baseline	6.4	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Income Billions of dollars												
Corporate Profits												
Balanced budget	646	662	685	706	740	778	811	846	887	929	974	1023
Baseline	646	661	681	692	707	727	751	780	814	850	888	932
Wage and Salary Disbursements												
Balanced budget	3,628	3,799	3,953	4,131	4,321	4,521	4,730	4,948	5,175	5,412	5,660	5,918
Baseline	3,628	3,798	3,951	4,127	4,314	4,512	4,719	4,935	5,159	5,393	5,637	5,893
Percentage of GDP												
Corporate Profits												
Balanced budget	8.5	8.4	8.3	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Baseline	8.5	8.3	8.2	8.0	7.8	7.6	7.5	7.5	7.4	7.4	7.4	7.4
Wage and Salary Disbursements												
Balanced budget	47.9	48.0	47.7	47.6	47.4	47.3	47.3	47.2	47.2	47.1	47.1	47.1
Baseline	47.9	48.0	47.7	47.6	47.4	47.3	47.3	47.2	47.2	47.1	47.1	47.1

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Incorporates data for the first three quarters of 1996 published November 27, 1996.

b. The growth of GDP is always greater in the balanced budget projection than in the baseline. Because of rounding, however, the differences do not show up in the table for every year.

Table 4-3.
Economic Effects of Balancing the Budget by 2002, as Estimated in January 1997 and May 1996
(By calendar year)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Real GNP (Percentage change from baseline)												
January 1997	0	0	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6	0.7
May 1996	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	n.a.
Real GDP (Percentage change from baseline)												
January 1997	0	0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4
May 1996	0	0	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6	n.a.
Interest Rates (Percentage points)												
Three-month Treasury bills												
January 1997	0	0	0	-0.3	-0.5	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
May 1996	0	0	-0.5	-0.9	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	n.a.
Ten-year Treasury notes												
January 1997	0	0	-0.1	-0.4	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
May 1996	-0.3	-0.9	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	n.a.
Income (Percentage of GDP)												
Corporate profits ^a												
January 1997	0	0	0	0.2	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.7
May 1996	0	0.3	0.6	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	n.a.
Other income subject to federal taxes												
January 1997	0	0	0	-0.2	-0.5	-0.7	-0.8	-0.9	-1.0	-1.0	-1.1	-1.1
May 1996	-0.1	-0.3	-0.7	-0.9	-1.1	-1.2	-1.3	-1.3	-1.4	-1.4	-1.4	n.a.
Wage and salary disbursements												
January 1997	0	0	0	0	0	0	0	0	0	0	0	0
May 1996	0	0	0	0	0	0	0	0	0	0	0	n.a.
Memorandum: (Percentage of GDP)												
Federal Net Interest												
January 1997	0	0	0	-0.1	-0.2	-0.3	-0.4	-0.5	-0.5	-0.6	-0.6	-0.7
May 1996	0	-0.1	-0.2	-0.4	-0.5	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	n.a.
Business Interest												
January 1997	0	0	0	-0.1	-0.3	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6
May 1996	0	-0.3	-0.6	-0.8	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	n.a.
Dividends												
January 1997	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
May 1996	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	n.a.
Depreciation												
January 1997	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
May 1996	0	0	0	0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	n.a.

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Calculated using economic rather than tax depreciation.

(real GNP), will be about three-quarters of a percentage point higher under balanced budget policies by 2007, and the level of real gross domestic product (GDP) will be almost half a percentage point higher (see Table 4-3). The beneficial effect on real output of maintaining a zero deficit will be even greater after 2007 because the capital stock of the nation will continue to grow relative to the baseline.

Balancing the budget enhances potential growth because it permits productive resources that are currently devoted to consumption to be allocated instead for investment. In the near term, the share of total output that is consumed—either in the provision of government services or as private consumption—will fall, as will the level of consumption. In the long run, however, the level of consumption will be higher because the greater rate of investment will boost total output.

The national saving rate will be higher under a balanced budget, but only about 20 percent of the reduction in the federal government's claim on saving will go toward investment. Two effects will partially offset the influence of deficit reduction on investment—private saving rates will probably fall, and the level of borrowing from foreigners will shrink. The degree to which private saving will fall depends on the particular policies used to reduce the deficit. If the policies do not change incentives to save, the drop in private saving is likely to be between 20 percent and 50 percent of the reduction in the deficit.

The effect of deficit reduction on domestic investment, and therefore on the growth of potential GDP, will also be weakened by reduced borrowing from abroad, but that does not diminish the benefit of deficit reduction to U.S. living standards. Less borrowing from abroad for investment in the United States will reduce the cost of servicing debt held by foreigners, so U.S. living standards will be higher. The effect of lower deficits on GNP is consequently greater than the effect on GDP. GNP includes net claims of U.S. residents on the returns from foreign factors of production, whereas GDP includes only output produced within the United States.

Interest Rates

Balancing the budget would lower interest rates. A great deal of uncertainty surrounds that effect, but CBO assumes that the baseline deficits of about 2 percent of GDP in the early years of the next century cause short- and long-term interest rates to be about 0.7 percentage points higher than what they would be if the budget was balanced.

The academic literature reflects the lack of agreement about the precise effect of deficit reduction on interest rates. Because U.S. capital markets are integrated with capital markets worldwide, some economists argue that changes in the federal deficit will have a small effect on interest rates. U.S. rates, they maintain, are affected by changes in the worldwide pool of savings and worldwide demands for investment, and the potential deficit reduction is small relative to world markets. Numerous counterarguments can be made, however. The United States is a large player in world markets, and changes in U.S. saving rates may therefore have a significant effect on world interest rates. In addition, some empirical studies find that domestic interest rates are affected primarily by changes in domestic saving and investment demand, even in countries with open capital markets. A credible deficit reduction policy would cause domestic saving to rise relative to domestic investment, thus lowering interest rates.

Given those diverse opinions, the range of estimates of the effect of deficit reduction on interest rates in the academic literature is large. Some investigators estimate that reducing the deficit from 2 percent of GDP to zero would lower rates on the order of 0.2 percentage points; others argue that rates would fall by about 1.5 percentage points. The drop of 0.7 percentage points that CBO assumes is slightly below the midpoint of the range.

In CBO's projections, balancing the budget has no effect on inflation, so real interest rates move the same way as nominal rates. Although the Federal Reserve's task of maintaining a low rate of inflation might be easier in an environment of gradual deficit reduction, no

strong reasons exist for believing that the Federal Reserve would change its goals for inflation. In the projections, real interest rates therefore fall by the same 0.7 percentage points as nominal interest rates.

Income Shares

Projections of the federal tax bases are affected not only by the total level of nominal GDP but also by how total GDP is allocated among various categories of income. For example, projections that differ only in how GDP is allocated between corporate profits and interest payments can have quite different implications for deficit projections.

The drop in interest rates and the decrease in the national debt that accompany a policy of deficit reduction suggest a higher share of corporate profits in GDP and a lower share of interest income. Corporate costs for debt service probably would be smaller with lower interest rates, thus reducing interest expenses and increasing profits. In the longer term, increased investment would raise corporate depreciation, which would offset part of that increase. Other income shares would be affected as well. Dividends would increase slightly, but federal net interest payments would decline.

On balance, the changes in income shares that are expected to accompany a policy of deficit reduction increase revenues. Taxable corporate profits would make up a larger share of GDP. Interest income would be smaller, but a hefty portion of interest income accrues to organizations or pension funds that are not subject to tax. Therefore, the shift from interest income to profits would tend to increase revenues.

Labor Markets

Because CBO assumes that the short-run restraint that deficit reduction imposes on economic activity will be fully offset by monetary policy, the balanced budget projections for the labor force and the unemployment rate are the same as the current-policy projections. The general effects of deficit reduction—an increase in the national saving rate, higher real growth, lower interest rates, and changes in income shares—are not likely to have significant effects on labor markets. Specific policies for deficit reduction could change the incentive to

work and therefore could affect growth of the labor force, but such effects are not included in these projections. The additional growth in output in the balanced budget projections is generated only by the higher level of investment and capital stock. Growth in labor productivity is consequently higher, but the projection of growth of the labor force is unchanged.

Changes in Estimates of the Economic Effects of Balancing the Budget

The estimated economic effects of a balanced budget policy are smaller in the current projections than in the May 1996 projections (see Table 4-3). The primary reason for the smaller effect is that the baseline deficit is about one-third smaller, so eliminating it has a correspondingly smaller economic effect. In addition, the effect on interest rates occurs more slowly than CBO assumed last May. The delayed effect on interest rates in turn delays the macroeconomic effects compared with the paths indicated in May and slightly reduces the ultimate impact of deficit reduction.

In most cases, the one-third reduction in the size of the fiscal dividend is evident when the current estimated effects are compared with those estimated in May. The change in CBO's estimate of the effect of deficit reduction on interest rates, however, is more involved. Last May's projection assumed that some of the drop in long-term interest rates that occurred during 1995 stemmed from anticipation that deficits would be lower than projected in the CBO baseline. That is, if a credible balanced budget policy had been adopted early in 1996, CBO would have expected interest rates to continue the decline that started during 1995. In fact, long-term interest rates rose sharply during the first half of 1996, perhaps partly in response both to short-run concerns that inflation and real growth would be stronger than previously expected and to the fading prospects of a large deficit reduction agreement between the Administration and the Congress.

Surprising deficit news in the summer of 1996 should have pushed interest rates lower again in spite of the failure to reach agreement on a deficit reduction plan. Growth in federal outlays, particularly for medical programs, was slower than expected during 1996,

and personal income tax revenues made a surprising surge in April. Those two factors resulted in a much lower deficit for 1996 than had been envisioned even in March of 1996, and numerous private-sector forecasters reduced their projections of future deficits. If nothing else had changed, and if the perception of lower future deficits had been widespread, interest rates should have eased during the second half of 1996.

Long-term interest rates fell during the last half of the year, but rates would have fallen more if deficits were truly expected to be lower and if deficits truly have a large effect on interest rates. Instead, the drop in long-term rates was slightly less than even the midrange assumption CBO had used in May 1996. Other factors such as changes in expected inflation, concern about possible tax cuts, and changes in growth or interest rates overseas influence U.S. rates. In retrospect, however, most of those effects would have reinforced a decline in interest rates. As a result of that experience, CBO has reduced its estimate of how quickly interest rates fall in response to deficit reduction.

The Budgetary Implications of the Balanced Budget Economic Assumptions

The improved economic conditions that can be expected to accompany enactment of legislation balancing the budget in turn brighten the budget outlook. CBO projects a reduction in the deficit that grows from \$1 billion in 1998 to \$34 billion in 2002 and \$70 billion in 2007. Approximately one-third of the fiscal dividend is the result of increased revenues; the remaining two-thirds is the result of reduced outlays (see Table 4-4).

CBO's Current Estimate of the Fiscal Dividend

The largest proportion of the fiscal dividend is attributable to the change in revenues and reduction in outlays that result from lower interest rates. Those changes account for 75 percent of the \$77 billion cumulative total for the 1997-2002 period, and about 70 percent of the \$357 billion total for the entire projection period

(see Table 4-5). Higher levels of GDP that result in higher revenues account for less than one-fifth of the total benefit for either period; the rest reflects the reduction in government debt and accompanying debt-service savings that result from the fiscal dividend in earlier years.

Lower interest rates reduce outlays because the budget is highly sensitive to changes in interest rates. Total outlays are below the baseline projections in every year of the projection period after 1998 under balanced budget economic assumptions. Almost all of the decrease is found in the net interest category. Mandatory spending accounts for a minor portion of the decrease (no more than \$500 million in any year), all of which is attributable to student loan programs. Lower interest rates reduce outlays as a share of GDP by half a percentage point after 2005, from 21.1 percent to 20.6 percent.

On balance, lower interest rates increase revenues. The shift in income shares that is expected to result from lower interest rates leads to higher revenues because more income is received from corporate profits and less from interest income. However, lower interest rates decrease Federal Reserve earnings, which are considered to be revenues in the budget, because the Federal Reserve's portfolio of Treasury securities earns less interest under the balanced budget economic assumptions, mirroring the decline in federal interest paid on those securities.

Slightly higher growth in gross domestic product leads to increased revenues because the tax base grows larger as the economy grows larger. As a result of faster growth and changes in income shares, total revenues as a share of GDP increase by about 0.1 percentage point. Virtually all of that increase comes from corporate taxes; other taxes basically maintain their current share of GDP. Annual growth in corporate taxes is expected to rise sharply at first, more slowly later.

CBO's estimate of the fiscal dividend and its projections of deficits, revenues, and outlays presented in Table 4-4 are intended to help policymakers gauge the amount of deficit reduction that is necessary to balance the budget. In the absence of an enacted and credible plan to balance the budget, however, the fiscal dividend will not materialize.

Table 4-4.
Changes in Budget Aggregates Resulting from the Economic Effects of Balancing the Budget by 2002
(By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Deficit											
With balanced budget economic assumptions	124	119	143	158	143	154	160	170	198	203	208
With baseline economic assumptions	124	120	147	171	167	188	202	219	254	266	278
Decrease with balanced budget economic assumptions	a	1	4	13	25	34	42	49	56	63	70
Total Revenues											
With balanced budget economic assumptions	1,508	1,568	1,635	1,710	1,789	1,871	1,956	2,047	2,143	2,244	2,352
With baseline economic assumptions	1,507	1,567	1,634	1,705	1,781	1,860	1,943	2,033	2,127	2,227	2,333
Increase with balanced budget economic assumptions	b	1	2	4	8	11	13	14	16	17	19
Total Outlays											
With balanced budget economic assumptions	1,632	1,687	1,778	1,868	1,931	2,025	2,116	2,218	2,341	2,447	2,559
With baseline economic assumptions	1,632	1,687	1,781	1,877	1,948	2,049	2,145	2,252	2,381	2,492	2,611
Decrease with balanced budget economic assumptions	b	b	2	9	17	23	29	35	40	46	52
Memorandum:											
Deficit as a Share of GDP											
With balanced budget economic assumptions	1.6	1.5	1.7	1.8	1.5	1.6	1.5	1.6	1.7	1.7	1.7
With baseline economic assumptions	1.6	1.5	1.7	1.9	1.8	1.9	2.0	2.0	2.2	2.2	2.2
Revenues as a Share of GDP											
With balanced budget economic assumptions	19.3	19.2	19.1	19.0	19.0	18.9	18.9	18.9	18.9	18.9	18.9
With baseline economic assumptions	19.3	19.2	19.0	19.0	18.9	18.8	18.8	18.8	18.8	18.8	18.8
Outlays as a Share of GDP											
With balanced budget economic assumptions	20.8	20.6	20.7	20.7	20.5	20.5	20.4	20.4	20.6	20.6	20.6
With baseline economic assumptions	20.8	20.6	20.8	20.9	20.7	20.8	20.8	20.8	21.0	21.1	21.1

SOURCE: Congressional Budget Office.

NOTE: These projections assume no change in current policy, with discretionary spending at the level of the statutory cap in 1998 and adjusted for inflation thereafter.

a. Decrease of less than \$500 million.

b. Increase of less than \$500 million.

Changes in CBO's Estimate of the Fiscal Dividend Since May

CBO's current estimate of the fiscal dividend is significantly smaller than the estimate it published last May. In its May report, CBO estimated that the fiscal dividend would provide a cumulative boost of \$254 billion to deficit reduction efforts in the 1996-2002 period. The current estimate of \$77 billion is two-thirds lower than the May estimate, a much greater reduction than the one-third decline in the economic impact of eliminating the deficit discussed above.

Three factors explain the change in CBO's estimate of the fiscal dividend. First, baseline deficits are significantly lower. Second, enactment of a deficit reduction package leading to balance in 2002 is expected to occur later than was expected in May. Third, CBO expects that the effect on interest rates of eliminating deficits will be delayed longer than was initially thought.

The deficits in CBO's baseline under current-policy economic assumptions are sharply lower than those

expected last May. Over the 1997-2002 period, CBO has reduced its deficit projections by \$454 billion, including a reduction of \$97 billion in its projection for 2002 alone. That reduction represents a one-third decrease in the deficit both cumulatively and in 2002. Because baseline deficits are lower by one-third, one would expect the current estimate of the fiscal dividend to be one-third lower too. Smaller deficits imply that the budgetary benefits that can be expected from balancing the budget will be smaller. Lower baseline deficits account for a large portion of the change in the estimate of the fiscal dividend, but not all of the difference.

The current estimate of the fiscal dividend is also smaller because CBO has changed its assumptions about when a deficit reduction plan will be enacted. CBO had assumed that the Congress would enact such a plan before the end of fiscal year 1996, but CBO now assumes that enactment will not occur until the start of 1998, which amounts to a delay of a year and a half in achieving the benefits of budgetary balance that the fiscal dividend represents. The current assumption is generally consistent with recent experience. Typically,

Table 4-5.
Changes in the Deficit Resulting from the Economic Effects of Balancing the Budget by 2002
(By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total 1997- 2002	Total 1997- 2007
Change Resulting from Lower Interest Rates													
Outlays													
Net interest	0	a	-2	-8	-15	-20	-24	-27	-30	-33	-36	-46	-196
Student loans	a	a	a	a	a	a	a	a	a	a	a	a	-3
Revenues ^b													
Federal Reserve earnings	0	a	a	1	2	3	3	3	4	4	4	3	24
Shift in income shares	-a	-a	-1	-3	-6	-9	-10	-11	-11	-12	-12	-19	-74
Subtotal	a	a	-2	-10	-20	-27	-32	-35	-38	-41	-44	-58	-248
Change in Revenues Resulting from Higher GDP	a	-1	-2	-3	-4	-5	-6	-7	-8	-10	-11	-14	-55
Debt Service	a	a	a	-1	-2	-3	-5	-7	-9	-12	-15	-5	-54
Total Effect on the Deficit	a	-1	-4	-13	-25	-34	-42	-49	-56	-63	-70	-77	-357

SOURCE: Congressional Budget Office.

a. Less than \$500 million.

b. Revenue reductions are shown as positive because they increase the deficit.

legislation implementing major budget agreements is enacted late in the Congressional session.

Finally, CBO has changed its estimate of when interest rates would respond to deficit reduction. Even though debt held by the public will be about \$350 billion lower by 2002 than expected last May, a small uptick in interest rates applied to over \$4.5 trillion of such debt outstanding markedly reduces the budgetary impact of balancing the budget.

Implications of CBO's Projections for Budget Plans

The balanced budget projections presented in this chapter will be used by CBO to evaluate proposals that strive to balance the budget by fiscal year 2002. CBO expects that those projections will provide the starting point for Congressional consideration of plans to balance the budget. CBO also will use the economic and technical assumptions reflected in those projections in reestimating the President's budget proposal.

The projections imply that a deficit reduction plan to achieve budgetary balance by 2002 does not require policy changes that equal the full amount of the baseline deficit in that year. Provided that the path of enacted deficit reduction is consistent with the path assumed in calculating the fiscal dividend, such legislation needs to produce \$154 billion in savings in 2002 (including associated debt-service savings), \$34 billion less than the baseline deficit of \$188 billion expected under current-policy economic assumptions. That amount of savings, which occurs in the fifth year, is about \$5 billion below the comparable amount enacted in the Omnibus Budget Reconciliation Act (OBRA) of 1990 and about \$10 billion above the comparable amount in OBRA-93. But it is about equal to the amount of net changes in the deficit for fiscal year 2001 in the conference agreement on the 1997 budget resolution (2001 is the fifth year of that plan). On a cumulative basis, the \$423 billion in legislative changes assumed in the illustrative path of deficit reduction is lower than the comparable figures in OBRA-90 and OBRA-93 (by \$59 billion and \$10 billion, respectively) but higher than the \$372 billion anticipated by the 1997 budget resolution for the first five years of that plan (1997-2001).

Table 4-6.
Savings from Freezing Discretionary Spending at the Level of the 1998 Cap in Relation to Total Policy Savings in CBO's Illustrative Path (By fiscal year, outlays in billions of dollars)

	1997	1998	1999	2000	2001	2002	Total 1997-2002
Savings Resulting from Freezing Discretionary Spending at the Level of the 1998 Cap	0	0	-19	-35	-60	-78	-192
Debt Service	<u>0</u>	<u>0</u>	<u>-1</u>	<u>-2</u>	<u>-4</u>	<u>-8</u>	<u>-15</u>
Total Savings from a Freeze	0	0	-20	-37	-65	-86	-208
Total Savings from a Freeze as a Percentage of Total Policy Savings in CBO's Illustrative Path	n.a.	0	38	46	54	56	49

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

Because CBO's new projections have lower deficits, freezing discretionary spending in dollar terms through fiscal year 2002 would produce a larger share of the total policy savings needed to balance the budget than was the case in the illustrative path of deficit reduction CBO published last August in its report, *Reducing the Deficit: Spending and Revenue Options*. (Such a freeze would also be roughly consistent with assumptions in the deficit reduction plans proposed last year by the Congress and by the President.) CBO now estimates that freezing discretionary spending at the level of the 1998 cap (which is \$4 billion lower than the amount projected for 1998 if spending is frozen at the level appropriated in 1997) would reduce outlays below CBO's capped baseline with discretionary inflation by a cumulative \$208 billion (including debt-service savings) through 2002 (see Table 4-6). Under such a

freeze, the purchasing power of appropriations in 2002 would be 14 percent below that of the appropriations enacted for 1997.

As shown in Table 4-6, a freeze on discretionary spending produces roughly half of the policy savings CBO expects in its illustrative path of deficit reduction over five years, and 56 percent in the last year alone. That amount is disproportionate to the one-third of total spending that is accounted for by discretionary spending. It also leaves half of the policy changes necessary to achieve a balanced budget undefined and may be viewed skeptically by financial markets. A deficit reduction plan that delays decisions about a large proportion of deficit reduction may make the fiscal dividend smaller.

Appendixes

Sequestration Preview Report for Fiscal Year 1998

Sequestration—the cancellation of budgetary resources—is an automatic procedure to control discretionary appropriations and legislative changes in direct (that is, mandatory) spending and receipts.¹ The Congress and the President can avoid sequestration by keeping discretionary appropriations within established limits and by making sure that the cumulative effect of legislation modifying direct spending or receipts is deficit neutral in the current year and the budget year combined.

Federal law requires the Congressional Budget Office (CBO) each year to issue a sequestration preview report five days before submission of the President's budget, a sequestration update report on August 15, and a final sequestration report 10 days after a session of Congress ends. Each sequestration report must contain estimates of the following items:

- o The current discretionary spending limits and any adjustments to them; and
- o The amount by which legislation enacted since the Budget Enforcement Act of 1990 that affects direct spending or receipts has increased or decreased the deficit, as well as the amount of any required pay-as-you-go (PAYGO) sequestration.

1. The current sequestration requirements were established by the Budget Enforcement Act of 1990, which amended the Balanced Budget and Emergency Deficit Control Act of 1985 and the Congressional Budget and Impoundment Control Act of 1974 to add new enforcement procedures for discretionary spending, direct spending, and receipts for fiscal years 1991 through 1995. The Omnibus Budget Reconciliation Act of 1993 extended the application of those procedures through 1998.

The final sequestration report must also include the amount of discretionary new budget authority for the current fiscal year, estimated total discretionary outlays, and the amount of any required discretionary sequestration.

This preview report to the Congress and the Office of Management and Budget (OMB) provides the required information for fiscal year 1998. It concludes that the caps on discretionary spending for 1998 are constraining, and that the Congress will need to reduce 1998 budget authority below the 1997 level to achieve compliance. For mandatory spending, by contrast, a modest PAYGO balance will be available to offset the cost of legislation that increases such spending for 1998.

Discretionary Sequestration Report

The Budget Enforcement Act of 1990 (BEA) established discretionary spending limits for fiscal years 1991 through 1995 and provided for across-the-board cuts—known as sequestration—should annual appropriations breach the limits. The BEA also included specific instructions for adjusting those spending caps. The Omnibus Budget Reconciliation Act of 1993 (OBRA-93) set limits on total discretionary budget authority and outlays for fiscal years 1996 through 1998 and extended the existing enforcement procedures, in-

cluding cap adjustments, for that period. Spending from the Violent Crime Reduction Trust Fund (VCRTF) was excluded from the caps by the Violent Crime Control and Law Enforcement Act of 1994, which created the trust fund. That act established separate limits through 1998 on VCRTF outlays and lowered the discretionary caps each year by those amounts.

CBO's current estimates of the limits on general-purpose (non-VCRTF) discretionary spending, shown in Table 1, differ from those published last October in CBO's final sequestration report for fiscal year 1997. Four factors account for the change. First, CBO revised the limits to reflect differences between the

spending limits in its final report and those in OMB's final report (published in November). Second, CBO adjusted the caps to reflect changes in concepts and definitions. Third, it raised the limits to reflect emergency spending released by the President. Last, it revised the limits for 1998 to reflect the difference between current projections of the inflation rate for 1996 through 1998 and the projections used to adjust the caps in the preview report that OMB issued in March 1996. The limits on VCRTF outlays are not subject to any adjustment, so the amounts shown in Table 1 are the same as those presented in CBO's final report in October.

Table A-1.
CBO Estimates of Discretionary Spending Limits for Fiscal Years 1997 and 1998 (In millions of dollars)

	1997		1998	
	Budget Authority	Outlays	Budget Authority	Outlays
General-Purpose Spending Limits in CBO's October 1996 Final Sequestration Report	527,395	547,359	528,857	544,116
Adjustments				
Technical differences from OMB's November 1996 final report	-364	-304	0	-38
Emergency funding made available since OMB's final report	5	5	0	0
Changes in concepts and definitions (changes to mandatory programs made in appropriation acts)				
Omnibus Consolidated Appropriations Act, 1997	0	0	-214	-27
Agriculture Appropriation Act	0	0	29	52
VA-HUD-Independent Agencies Appropriation Act	0	0	-35	-34
Subtotal	0	0	-220	-9
Changes in projected inflation rates	0	0	-6,736	-4,042
Total	-359	-299	-6,956	-4,089
General-Purpose Spending Limits as of January 21, 1997	527,036	547,060	521,901	540,027
Violent Crime Reduction Trust Fund Spending Limits	5,000	3,936	5,500	4,904
Total Discretionary Spending Limits	532,036	550,996	527,401	544,931

SOURCE: Congressional Budget Office.

NOTE: OMB = Office of Management and Budget; VA = Department of Veterans Affairs; HUD = Department of Housing and Urban Development.

Technical Differences Between the Limits in CBO's and OMB's Final Reports

The Budget Enforcement Act requires both CBO and OMB to calculate changes to the discretionary spending limits that result from such factors as the enactment of emergency appropriations. However, OMB's estimates of the limits are the ones that determine whether enacted appropriations fall within the caps or whether a sequestration is required to eliminate a breach of them. CBO's estimates are merely advisory. In acknowledgment of OMB's statutory role, when CBO calculates changes in the limits for a report, it first adjusts for the differences between the limits in its most recent report and those in OMB's most recent report. In effect, CBO uses OMB's estimates as the starting point for the adjustments that it is required to make in the new report.

The limit on budget authority for 1997 in CBO's October final report exceeded OMB's by \$364 million; the budget authority limit for 1998 was identical in the two agencies' reports. The entire 1997 difference results from the fact that CBO includes enacted contingent emergency appropriations when it computes the caps. CBO counts those appropriations as emergency spending in its cap adjustment when they are enacted because the Congress does not need to take any further action to make them available. OMB, however, does not include those appropriations until the President has released them as an emergency requirement.

The limits on outlays for both 1997 and 1998 in CBO's final report were also higher than OMB's. CBO's estimate of the outlay limit was \$304 million greater than OMB's for 1997 and \$38 million greater for 1998. Most of the difference (\$323 million for 1997 and \$14 million for 1998) is the effect on outlays of CBO's inclusion of enacted but unreleased contingent emergency appropriations in its cap adjustment. The rest of the difference comes from different estimates of the rates at which spending will flow from other emergency appropriations that have been made available.

Emergency Funding Made Available Since OMB's Final Report

As required by the Budget Enforcement Act, CBO adjusts the discretionary spending limits to reflect emergency appropriations made available since OMB's final report. Between November 1996 and January 1997, the Congress did not enact any emergency appropriations, but the President did release contingent emergency appropriations totaling \$5 million.

Changes in Concepts and Definitions

The Balanced Budget and Emergency Deficit Control Act of 1985 (the Balanced Budget Act) provides for adjusting the caps to take account of changes in budgetary concepts and definitions. Those adjustments generally reflect reclassifications of spending from one budget category to another.

The Congressional budget committees and OMB have determined that any increases or decreases in direct spending that result from provisions in an appropriation act should be reflected in the enforcement of the discretionary spending limits. (They have also determined that increases or decreases in discretionary spending that result from provisions in authorizing legislation should be reflected in the enforcement of the PAYGO rules.) When such changes are made in an appropriation act, the current effect is included in the estimate of the act, whereas the future effect is reflected as an adjustment to the discretionary caps. This method ensures that the appropriations committees are held responsible for the future effects of changes that their legislation makes in mandatory programs, but they are not held responsible for appropriations for discretionary programs that other committees provide.

Fiscal year 1997 appropriation acts contained various changes that affect mandatory spending, requiring a net reduction in the 1998 caps of \$220 million in budget authority and \$9 million in outlays (see Table 1). Three appropriation acts contained all of those changes. The Omnibus Consolidated Appropriations Act in-

cluded provisions that provide for a net increase in mandatory spending of \$214 million in budget authority and \$27 million in outlays. Most of that amount comes from a provision that limits administrative spending in the student loan program for 1997. Although that restriction produced savings for 1997, it will increase spending in 1998 because administrative spending for student loan programs is funded under a five-year limit (ending in 1998) that the act did not reduce. Under the terms of the five-year limit, spending will only be deferred from 1997 to 1998. The 1998 effect, therefore, is recorded as a reduction in the discretionary spending caps.

Provisions in the Agriculture Appropriation Act, by contrast, provided for a net decrease in mandatory spending of \$29 million in budget authority and \$52 million in outlays in 1998. Two items in the act account for most of that change. The first limits export subsidies under the Export Enhancement Program to \$100 million a year, which produces savings in 1998 relative to the levels previously enacted. Those savings cause increases in the caps. The second item limits new enrollment in the Wetlands Reserve Program for 1997 without reducing the program's overall statutory enrollment target of 975,000 acres. CBO assumes that enrollment will increase in 1998 as a result of the 1997 limitation. That increase in enrollment is recorded as a decrease in the budget authority cap, even though the 1998 effect of the 1997 action is sufficient to produce a net decrease in outlays and an increase in the outlay cap.

The Veterans Affairs and Housing and Urban Development Appropriation Act contained measures that increase mandatory spending in 1998 by \$35 million in budget authority and \$34 million in outlays. The measures in question relate to health benefits, including requiring insurers to provide a 48-hour hospital stay for new mothers and parity for mental health benefits. The effect of those provisions must be recorded as a decrease in the discretionary spending caps.

Changes in Projected Inflation Rates

The Balanced Budget Act also provides for an annual adjustment to the caps to reflect changes in inflation.

OMB interprets language added by OBRA-93 as allowing adjustments based on the difference between the latest projected inflation rates for 1996 through 1998 and the inflation rates forecast for those years at the time of OMB's prior preview report. CBO employs OMB's method of adjusting for inflation in deference to the agency's statutory role in enforcing the caps.

In its March 1996 preview report, OMB projected an inflation rate, as measured by the chain-weighted gross domestic product price index, of 2.7 percent a year for 1996, 1997, and 1998. CBO's current forecast is for inflation (measured the same way) of 2.2 percent in both 1996 and 1997, increasing to 2.6 percent in 1998. The cumulative effect of inflation rates is a reduction in the 1998 caps on discretionary budget authority of \$6,736 million. The decline in outlays resulting from the reduced budget authority is \$4,042 million. Those inflation adjustments are reflected in the caps shown in Table 1.

How the Caps Compare with Projected Discretionary Spending

The general-purpose spending limits for 1998 shown in Table 1 constrain CBO's baseline projection of budget authority and outlays. The usual baseline concept calls for calculating 1998 budget authority by increasing 1997 general-purpose appropriations to account for the effects of inflation. However, that procedure would yield budget authority that is \$3,726 million higher than the 1998 cap. The effect on outlays of that difference—plus the outlay effect of previously enacted appropriations—would exceed the cap on outlays by \$15,494 million.

CBO estimates that holding 1998 appropriations at the 1997 level, although meeting the cap on budget authority, would still result in outlays that exceed their cap by \$4,027 million. As a result, the Congress will need to reduce 1998 appropriations below the 1997 level or rescind previously enacted appropriations to comply with the 1998 cap on discretionary outlays.

Pay-As-You-Go Sequestration Report

A pay-as-you-go sequestration is triggered at the end of a Congressional session if legislated changes in direct spending programs or governmental receipts that were enacted since the Budget Enforcement Act increase the combined current and budget year deficits. In that case, nonexempt mandatory programs are cut enough to eliminate the increase. The pay-as-you-go provisions of the BEA applied through fiscal year 1995, and OBRA-93 extended them through 1998.

The Budget Enforcement Act requires both CBO and OMB to estimate the net change in the deficit resulting from direct spending or receipt legislation. As with the discretionary spending limits, however, OMB's estimates determine whether a sequestration is required. CBO has therefore adopted OMB's estimates of

changes in the deficit at the end of the previous session of Congress as the starting point for this report.

OMB's November 1996 final report estimated that changes in direct spending and receipts enacted between the time of the Budget Enforcement Act and the end of the 104th Congress decreased the combined 1997 and 1998 deficits by \$9,700 million. That estimate excludes changes in the deficit for 1996 through 1998 that resulted from legislation enacted before OBRA-93 (the pay-as-you-go procedures did not apply to those years until OBRA-93 was enacted) and deficit reduction contained in OBRA-93 itself (such an exclusion is required by law).

The Omnibus Consolidated Appropriations Act requires that 1997 PAYGO savings be earmarked for deficit reduction. Accordingly, \$6,234 million in 1997 savings have been removed from the PAYGO figures shown in Table 2, leaving only \$3,466 million available in 1998 to offset the cost of future legislation.

Table A-2.
Budgetary Effects of Direct Spending or Receipt Legislation
Enacted Since the Budget Enforcement Act (By fiscal year, in millions of dollars)

	1997	1998
Total for OMB's November 1996 Final Sequestration Report ^a	-6,234	-3,466
Adjustment Required by Section 4001 of the Omnibus Consolidated Appropriations Act, 1997	6,234	n.a.
Legislation Enacted Since OMB's Final Report	<u>0</u>	<u>0</u>
Change in the Deficit Since the Budget Enforcement Act	0	-3,466

SOURCE: Congressional Budget Office.

NOTE: OMB = Office of Management and Budget; n.a. = not applicable.

- a. Section 254 of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended by the Budget Enforcement Act of 1990, calls for a list of all bills enacted since the Budget Enforcement Act that are included in the pay-as-you-go calculation. Because the data in this table assume OMB's estimate of the total change in the deficit resulting from bills enacted through the date of its report, readers are referred to the list of those bills included in Table 6 of the *OMB Final Sequestration Report to the President and Congress* (November 15, 1996) and in previous sequestration reports issued by OMB.

This table corrects the estimates in OMB's final report for one bill that had its deficit effect entered in the wrong years.

Procedural Constraints on the Budget

Since 1985, statutes intended to control the deficit have constrained policymakers in making their budgetary decisions. But curbs on aggregate discretionary appropriations and on direct spending and revenue legislation that have been in effect since 1990 are expiring; they will not apply to budgets after fiscal year 1998 unless they are extended. A different kind of constraint, however, a kind of line-item veto, has just taken effect. In addition, the 105th Congress is likely to consider a variety of reforms intended to strengthen budget discipline and make the process more efficient.

Budget Enforcement Procedures

The Balanced Budget and Emergency Deficit Control Act of 1985 (popularly known as Gramm-Rudman-Hollings) set annual deficit targets that were intended to lead to a balanced budget in 1991. It also established a procedure—known as sequestration—to make those goals binding. Under sequestration, an across-the-board reduction in spending (excepting numerous entitlement programs) would automatically occur if the projected deficit exceeded its goal. The deficit targets were revised in 1987, and lawmakers designated 1993 as the year in which the deficit would be eliminated. Although the deficit declined in the fiscal year following enactment of Gramm-Rudman-Hollings (and remained virtually at the same level for the next two

years) the fixed deficit target approach failed to achieve the desired reductions. (For 1990, the last year for which the procedures were fully in effect, the actual deficit exceeded the revised target deficit by \$121 billion and the original target by \$185 billion.) Moreover, that approach led to rosy economic projections, the use of questionable budgetary saving such as timing shifts, and a perception that the process put an unfair burden on discretionary appropriations. Consequently, the law was amended by the Budget Enforcement Act of 1990 (BEA).

In place of fixed deficit targets, the BEA established annual caps on discretionary budget authority and outlays provided in appropriation acts. It also instituted a pay-as-you-go requirement for mandatory spending and revenue legislation. Under the BEA, discretionary appropriations in excess of the caps trigger a sequestration of only discretionary spending. Furthermore, a sequestration of mandatory spending is imposed if the net effect of all legislation affecting mandatory spending or revenues is to increase the deficit. (See Appendix A for more detail on those procedures.) The BEA kept those rules in place through fiscal year 1995. The Omnibus Budget Reconciliation Act of 1993 extended them through 1998, with essentially no change.

In general, the BEA procedures have been successful in preventing new legislation from increasing the deficit. One indication that the pay-as-you-go procedure has been effective is that since 1990 proponents of legislation that would increase mandatory spending or

cut taxes have almost always been greeted with, "How are you going to pay for it?" That may seem an obvious question, but it was one that proponents of legislation did not generally have to answer before 1990. In addition, there have been no pay-as-you-go sequestrations. Since the enactment of the BEA, only two small discretionary sequestrations have been ordered. In one case, the sequestration offset an overage that the Office of Management and Budget estimated at \$2.4 million (the Congressional Budget Office estimated that appropriations did not exceed the cap), which resulted in a sequester reducing each discretionary spending account by .0013 percent. In the other instance, enacted appropriations exceeded the cap by \$395 million because of a drafting mistake in an appropriation bill enacted just before the Congress adjourned for the year. When the Congress reconvened, it enacted legislation that corrected the mistake and canceled the sequestration.

Although the BEA procedures have been successful in constraining new budgetary legislation, many Members of Congress have expressed concern that those constraints do not limit increases in mandatory spending that can occur without changes in law and do not require the elimination of deficits. With the expiration of the BEA procedures looming, the Congress must decide whether to extend those constraints (either in essentially the same form or with modifications).

The Line-Item Veto

The Congress and the President enacted the Line Item Veto Act last year. The law, which went into effect on January 1, 1997, represents a different kind of constraint on the budgetary decisions of the Congress. It amends the Impoundment Control Act of 1974 and grants the President the authority to cancel certain new spending or tax benefits that he signs into law after that date. The act remains in effect for eight years.

The Line Item Veto Act is intended to allow the President—as part of a broader effort to reduce the deficit—to eliminate new spending and tax breaks that he deems wasteful or unnecessary. Although there is disagreement over whether the new law will reduce the deficit, most observers agree that it is a significant change in the federal budget process that is likely to

shift budgetary power from the Congress to the President.

Under the Act, the President may cancel "any dollar amount of discretionary budget authority, any item of new direct spending, or any limited tax benefit" that he signs into law. (Thus, the act does not actually grant the President an item veto, which would allow him to reject parts of a measure before signing the rest into law.) The President must notify the Congress of any cancellations by special message and he must do so within five days of signing the law from which any cancellations have been made. Cancellations go into effect only when the Congress receives the special message.

A cancellation may only be overturned by the enactment of a subsequent law. For each special message, the Congress may consider a "disapproval bill" under fast-track legislative procedures during a 30-day review period (that could extend well beyond 30 calendar days because of recesses and adjournments). The President may not use his cancellation authority on a disapproval bill. Of course, the Congress may include provisions overturning cancellations as part of a measure that is not a disapproval bill, but such a measure would not come under fast-track procedures or be protected from the President's cancellation authority.

Before the Line Item Veto Act, the President could propose to cancel amounts of budget authority provided by law, but any such rescission that he proposed had to be enacted into law to go into effect permanently. Now, the President may unilaterally cancel certain spending and tax benefits that he has signed into law, and any cancellations can only be reversed by the enactment of a subsequent law. Because the President seems likely to veto any disapproval bill, such a measure will probably require the support of two-thirds of the Congress—the margin needed to override a veto—to ensure its enactment.

In certain respects the act is broader, and in others more restrictive, than some earlier proposals to expand the President's impoundment authority. For example, earlier proposals generally would have applied only to discretionary appropriations provided in annual appropriations acts. The act permits the President to cancel such amounts as well as certain new, direct (mandatory) spending and tax benefits. In the case of discretionary

appropriations, however, the President may only cancel entire dollar amounts specified in appropriations acts, governing committee reports, or related statutes. He may not cancel a portion of such amounts, which would have been allowed under some earlier proposals.

Budget enforcement procedures in effect since 1990 have worked to prevent new spending and revenue laws from increasing the deficit. It is unclear whether the President's new authority will lead to further reductions in the deficit or will simply empower him to substitute his own budgetary priorities for those of the Congress. In any event, the Act does not address the leading cause of recent and projected deficits; namely, mandatory spending increases under existing law. To control such spending, whether as part of a plan to balance the budget or for other purposes, the Congress must enact legislation modifying existing laws.

Consideration of Other Procedural Constraints

Many Members of Congress have expressed concern that there are no procedures in place to force the Con-

gress and the President to deal with the deficit or increases in entitlement spending. In addition, many Members are frustrated by the amount of time spent on the budget and by perceived flaws in the budget process. Whether the BEA procedures are extended or not, the Congress will probably consider a number of other changes in process. It is almost certain to consider again the adoption of an amendment to the Constitution that would mandate a balanced federal budget. Such a proposal passed the House in the 104th Congress but failed by a narrow margin in the Senate to secure the two-thirds vote required to send the proposed amendment to the states for ratification. Other changes in budget procedures that have been discussed in recent years include proposals to set enforceable caps on entitlement spending, to move to a biennial budget, and to make the Congressional budget resolution a joint resolution that must be presented to the President for his signature. Along with a constitutional amendment to balance the budget and the extension of the BEA procedures, those and other budget process changes are also likely to be considered in the 105th Congress.

An Analysis of Congressional Budget Estimates

In June 1995, the Congress adopted a budget resolution for fiscal year 1996 that anticipated a deficit of \$170.3 billion. Unlike the previous year's budget resolution, the one for 1996 assumed passage of an ambitious deficit reduction package that sought to balance the federal budget by the end of fiscal year 2002. It called for policies that would have reduced the deficit by \$40 billion in 1996. The discretionary spending policies in the budget resolution were subsequently enacted. But an omnibus reconciliation bill to realize the resolution's mandatory cuts was vetoed by the President.

Although most of the major changes in mandatory spending assumed in the 1996 budget resolution were never enacted, the actual 1996 deficit—\$107.3 billion—was \$63 billion lower than the figure in the resolution. That reduction can largely be attributed to two factors: more favorable economic conditions than expected, and other misestimates that the Congressional Budget Office (CBO) labels technical. The reduction marked the fourth straight year in which the actual deficit was less than the budget resolution had anticipated. Before fiscal year 1993, the actual deficit exceeded the figure in the budget resolution for 13 years in a row.

For fiscal year 1997, CBO's latest projections point to a deficit of \$124 billion—\$29 billion below the amount assumed in the 1997 budget resolution. As in 1996, the 1997 budget resolution assumed that the Congress would make major changes in mandatory spending, but they were never enacted. In addition, the

1997 budget resolution assumed a significant tax cut proposal that was not enacted. Thus, the likely reduction in the 1997 deficit below the level in the budget resolution appears to be resulting from the same type of economic and technical factors that caused a lower deficit in 1996.

Sources of Differences

The Congressional Budget Office divides the differences between budget resolutions and actual outcomes into three categories: policy, economic, and technical.

Policy differences reflect the passage of legislation that the budget resolution did not explicitly anticipate or legislation that cost (or saved) more money than it assumed. An example of the former is emergency appropriations, such as those for aid to victims of natural disasters, which by definition are hard to anticipate. Policy differences can also reflect the failure to enact legislation that the resolution assumed.

Economic differences arise because the performance of the economy cannot be predicted with precision. Every budget resolution contains assumptions about several key economic variables—chiefly, gross domestic product (GDP), taxable incomes, unemployment, inflation, and interest rates—that analysts need to estimate revenues and spending for benefit programs and net interest. Typically (as in the 1996 budget resolution), the economic assumptions are drawn from a

CBO forecast, although in about one-third of the cases—notably, in 1982 and for most of the years between 1988 and 1992—the Congress chose a different forecast, generally one from the Administration.

Soon after the end of the fiscal year, CBO judges how much of the difference between estimates in the budget resolution and actual revenue and outlay totals should be ascribed to economic factors, using information available at that time. It does not change that allocation later, even though revisions of data about GDP and taxable income continue to trickle in afterward. Only differences that can be rigorously linked to the major variables are labeled economic. Other differences that might be tied to economic performance (such as higher support payments to farmers in response to weak agricultural exports) are not included in this category because their relationship to CBO's published forecast is more tenuous.

All other types of discrepancies are classified as technical differences. Not surprisingly, technical misestimates are concentrated in revenues and in open-ended commitments of the government such as entitlement programs. Large technical differences often

prompt both CBO and the Administration to review their projection methods, but some such differences are inevitable given the size and complexity of the federal budget. The portions of the budget that have contributed the largest technical differences since 1980 are noted at the end of this appendix.

The Budget Resolution for Fiscal Year 1996

The Congress's budget resolution for fiscal year 1996 charted a course for steep reductions in the deficit that were aimed at achieving a balanced budget over seven years. Although the resolution assumed that most of the necessary spending cuts would be realized in the out-years, the Congress did plan to begin cutting both discretionary and mandatory spending in fiscal year 1996. The level of discretionary spending that the budget resolution proposed for 1996 was \$17 billion below CBO's projection of the statutory caps that govern such spending. The resolution also called for reducing mandatory spending by more than \$19 billion in 1996.

Table C-1.
Comparison of the CBO April 1995 Baseline, the 1996 Budget Resolution, and Actual Budget Totals for Fiscal Year 1996 (In billions of dollars)

	CBO April 1995 Baseline ^a	Budget Resolution ^b	Actual ^c	Actual Minus CBO April 1995 Baseline	Actual Minus Budget Resolution
Revenues	1,418	1,417	1,453	35	36
Outlays	1,628	1,588	1,560	-68	-28
Deficit	210	170	107	-103	-63

SOURCE: Congressional Budget Office.

NOTE: Totals include Social Security and the Postal Service, which are off-budget.

a. From Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 1996* (April 1995), Appendix A.

b. Concurrent Resolution on the Budget for Fiscal Year 1996.

c. From Department of the Treasury, *Final Monthly Treasury Statement, Fiscal Year 1996* (October 1996).

The 1996 budget resolution did not assume any specific level of tax cuts for each year, nor did it include the fiscal dividend that would be realized from balancing the budget. (For more information about the fiscal dividend, see Chapter 4.) Rather, the budget resolution indirectly addressed those issues by establishing a procedure that would allow for tax cuts over the seven-year period. If the House and Senate reported legislation to make the spending cuts specifically assumed in the resolution, the fiscal dividend could then be used to offset \$150 billion in tax cuts through fiscal year 2002.

As a whole, the resolution for fiscal year 1996 called for outlays of \$1,588 billion, revenues of \$1,417 billion, and a deficit of \$170 billion (see Table C-1).

Ultimately, outlays were \$28 billion lower than envisioned and revenues \$36 billion higher, resulting in a deficit that was \$63 billion smaller.

Changes in Policies

Congressional actions that differed from the policy assumptions in the budget resolution added an estimated \$25 billion to the deficit in 1996 (see Table C-2). Although the budget resolution called for substantial policy changes to mandatory spending programs, most were not enacted. The resolution called for \$8 billion in Medicare cuts and almost \$4 billion in Medicaid cuts for 1996, but those and other savings did not material-

Table C-2.
Sources of Differences Between the CBO April 1995 Baseline, the 1996 Budget Resolution, and Actual Budget Totals for Fiscal Year 1996 (In billions of dollars)

	Policy Differences			Economic Differences	Technical Differences	Total
	Emergencies	Other	Subtotal			
Actual Minus CBO April 1995 Baseline						
Revenues	0	a	a	24	11	35
Outlays						
Discretionary spending	1	-20	-18	0	a	-18
Mandatory spending	0	2	2	-4	-28	-30
Deposit insurance	0	0	0	0	-1	-1
Net interest	0	a	a	-20	1	-20
Offsetting receipts	0	a	a	0	1	1
Total	1	-18	-16	-24	-28	-68
Deficit	1	-17	-16	-48	-39	-103
Actual Minus Budget Resolution						
Revenues	0	-1	-1	24	12	36
Outlays						
Discretionary spending	1	-1	a	0	-1	-1
Mandatory spending	0	22	22	-4	-29	-11
Deposit insurance	0	0	0	0	-1	-1
Net interest	0	1	1	-20	1	-18
Offsetting receipts	0	2	2	a	1	3
Total	1	23	25	-24	-29	-28
Deficit	1	24	25	-48	-40	-63

SOURCE: Congressional Budget Office.

a. Less than \$500 million.

ize because the President vetoed the reconciliation bill that included them. In addition, the nearly \$6 billion in various welfare spending cuts that the budget resolution assumed for fiscal year 1996 were not achieved because welfare reform legislation was not enacted until the very end of the fiscal year. Finally, the budget resolution assumed more than \$2 billion in savings from offsetting receipts and almost \$1 billion in net-interest gains.

The only significant piece of legislation affecting 1996 mandatory outlays that was enacted was the Federal Agriculture Improvement and Reform Act of 1996. The budget resolution assumed that instead of simply extending the authority for agricultural programs, that year's farm bill would produce nearly \$1 billion in savings. When the farm bill was enacted almost a year after the adoption of the budget resolution, CBO estimated that it would increase spending by more than \$3 billion in 1996.

The budget resolution assumed that discretionary outlays would total \$534 billion in fiscal year 1996. The nonemergency discretionary outlays actually enacted that year were \$1 billion lower. However, the Congress also approved more than \$1 billion in emergency discretionary legislation in 1996. (Under the terms of the Balanced Budget and Emergency Deficit Control Act of 1985, emergencies are a valid reason for extra spending.) As a result, total discretionary spending slightly exceeded the amount assumed in the budget resolution.

Economic Factors

In several respects, the economic assumptions of the 1996 budget resolution (which were made in early 1995) proved to be too pessimistic. Differences between assumed and actual economic performance accounted for an estimated \$48 billion of the error in projecting the deficit (see Table C-2).

Half of the economic difference resulted from higher-than-expected revenues. Although real gross domestic product grew at about the predicted rate, total taxable income exceeded the projection. Moreover, corporate profits, which are taxed at a higher effective

rate than other types of income, made up a larger share of national income than expected.

The other half of the economic difference is attributable to lower spending for interest on government debt and for various benefit payments. Interest rates on 10-year Treasury notes averaged nearly a percentage point lower in the remainder of 1995 and in 1996 than the budget resolution assumed; short-term rates were lower by a lesser amount. Together, lower interest rates and less borrowing trimmed debt-service costs by \$20 billion. At the same time, outlays for Social Security, Medicare, and other benefit programs were slowed by lower-than-expected inflation and unemployment. The budget resolution assumed a Social Security cost-of-living increase of 3.1 percent in January 1996, but the actual increase was only 2.6 percent.

Technical Factors

Technical factors—the label given to any misestimates that cannot be traced to legislative actions or inaccurate economic assumptions—accounted for about \$40 billion of the overestimate of the deficit in the 1996 budget resolution (see Table C-2). Approximately \$29 billion of that misestimate fell on the outlay side of the budget and the other \$12 billion on the revenue side. Most of the \$12 billion in additional revenues resulted from unexpectedly high individual income tax receipts.

Except for \$1 billion in nonemergency discretionary spending, almost all of the outlay overestimates occurred in the category of mandatory spending. The government's two big health care programs—Medicare and Medicaid—each cost over \$7 billion less in 1996 than CBO had anticipated early in 1995. Social Security also spent over \$3 billion less than expected.

In addition, mandatory agricultural programs experienced changes due to technical factors. Total spending for agricultural programs in 1996 was almost \$3 billion less than the current-policy estimate assumed at the time of the budget resolution. However, as mentioned above, farm legislation increased spending from what it otherwise would have been by about \$3 billion. As a result, the total technical change in agricultural spending for 1996 was nearly \$6 billion.

Budget Resolutions for 1980 Through 1996

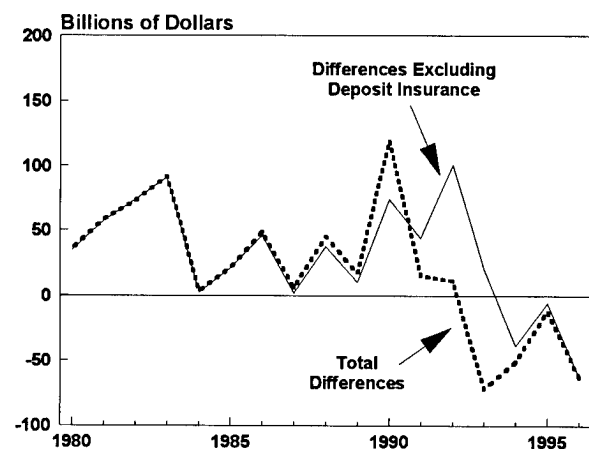
From 1980 through 1992, the actual deficit consistently exceeded the figure in the budget resolution by amounts ranging from a negligible (compared with the size of the budget) \$4 billion in 1984 to a staggering \$119 billion in 1990 in the midst of the savings and loan crisis (see Table C-3). The 1993 budget resolution altered that pattern. However, the reversal occurred that year only because spending for deposit insurance was lower than expected (see Figure C-1). In 1994, 1995, and 1996, the deficit continued to come in below the resolutions' assumptions, but in each of those years the improvement was more broadly based.

Policy action or inaction (the failure to achieve savings called for in the budget resolutions) has added an average of \$11 billion a year to the deficit. In only three years since 1980 did policymakers trim the deficit by more, or add to it by less, than the resolution permitted—namely, in fiscal years 1982, 1987, and 1991. The reasons vary: in fiscal year 1982 (the first Reagan-era budget), the first-year tax cut in the Economic Re-

covery Tax Act of 1981 was smaller than the resolution had assumed; in 1987, the new Tax Reform Act of 1986 temporarily swelled collections; and in 1991, \$43 billion in contributions from foreign nations to help finance Operation Desert Storm streamed in, lowering total outlays commensurately.

Because the budget process begins about nine months before the start of the fiscal year, economic performance is a regular source of uncertainty. The attribution of each fiscal year's economic errors shown in Table C-3 was based on the economic data available shortly after the end of the fiscal year. Those "actual" data in fact continue to be revised for years, often by large amounts. Although CBO does not attempt to make reassessments based on revised economic data, doing so could significantly alter the attribution of errors in past years. Nevertheless, those data suggest that until fiscal year 1993, budget resolutions tended to use short-term economic assumptions that proved overly optimistic. The worst errors, not surprisingly, were in years marked by recession or the early stages of recovery—namely, in 1982 and 1983 and again in the 1990-1992 period. Since 1993, that pattern has largely been reversed. Short-term economic assumptions in fiscal years 1993 through 1996 either proved quite accurate or tended to be overly pessimistic, mostly because the economy performed more strongly than expected.

Figure C-1.
Differences Between Actual Deficits
and Deficits in Budget Resolutions,
Fiscal Years 1980-1996



SOURCE: Congressional Budget Office.

Regardless of the direction of the error in the short-term forecast, economic differences occur chiefly in revenues and, on the spending side of the budget, in net interest. Despite the recent trend, economic differences have still caused Congressional drafters, on average, to err on the side of optimism to the tune of \$13 billion a year.

Technical misestimates of the deficit have averaged close to zero since 1980—although in absolute terms, disregarding whether the errors were positive or negative, they caused the average estimate of the deficit to be off by \$26 billion. The causes of large technical errors have varied over the years. On the revenue side, such misestimates were generally not very great through 1990, but they ballooned in 1991 and 1992 when tax collections were weaker than economic data seemed to justify. On the outlay side, farm price sup-

Table C-3.
Sources of Differences Between Actual Budget Totals and Budget Resolution Estimates,
Fiscal Years 1980-1996 (In billions of dollars)

	Policy Differences	Economic Differences	Technical Differences	Total
Revenues				
1980	6	8	-4	11
1981	-4	5	-13	-11
1982	13	-52	-1	-40
1983	-5	-58	-3	-65
1984	-14	4	-4	-13
1985	a	-20	3	-17
1986	-1	-23	-2	-27
1987	22	-27	7	2
1988	-11	4	-17	-24
1989	1	34	-8	26
1990	-7	-36	9	-34
1991 ^b	-1	-31	-24	-56
1992	3	-46	-34	-78
1993	4	-28	3	-20
1994	-1	12	4	15
1995	a	16	1	17
1996	-1	24	12	36
Average	a	-13	-4	-17
Absolute Average ^c	6	25	9	29
Outlays				
1980	20	12	16	48
1981	25	6	16	47
1982	1	24	8	33
1983	18	a	8	26
1984	1	7	-18	-9
1985	23	-5	-13	5
1986	14	-12	20	22
1987	7	-12	13	8
1988	-2	12	12	22
1989	17	14	12	43
1990	13	13	59	85
1991 ^b	-19	1	-22	-40
1992	15	-21	-60	-66
1993	16	-19	-90	-92
1994	10	-9	-36	-35
1995	2	17	-14	6
1996	25	-24	-29	-28
Average	11	a	-7	4
Absolute Average ^c	13	12	26	36

Table C-3.
Continued

	Policy Differences	Economic Differences	Technical Differences	Total
Deficit				
1980	13	4	19	37
1981	28	1	29	58
1982	-12	76	9	73
1983	22	59	11	91
1984	15	3	-14	4
1985	23	15	-16	22
1986	16	11	22	49
1987	-15	15	6	6
1988	9	8	29	46
1989	17	-20	20	17
1990	20	49	50	119
1991 ^b	-19	32	2	15
1992	12	25	-26	11
1993	12	9	-93	-72
1994	11	-21	-40	-50
1995	2	2	-15	-11
1996	25	-48	-40	-63
Average	11	13	-3	21
Absolute Average ^c	16	23	26	44

SOURCE: Congressional Budget Office.

NOTES: Differences are actual outcomes minus budget resolution assumptions.

The allocation of revenue differences between economic and technical factors is done soon after the fiscal year in question and is not changed later to incorporate revisions in economic data.

- a. Less than \$500 million.
- b. Based on the fiscal year 1991 budget summit agreement, as assessed by CBO in December 1990.
- c. The absolute average disregards whether the differences are positive or negative.

ports, receipts from offshore oil leases, defense spending, and benefit programs dominated the errors through the mid-1980s. Underestimates of benefit outlays, especially for health care programs, swelled again in 1991 and 1992, but the last three years have seen overesti-

mates of both Medicare and Medicaid spending. And deposit insurance, a major source of technical errors during the height of the savings and loan crisis, has become a less significant factor over the past two years.

How the Economy Affects the Budget

The federal budget is highly sensitive to the economy. Revenues depend on taxable incomes—including wages and salaries, interest and other nonwage income, and corporate profits—which generally move in step with economic growth. Many benefit programs are pegged to inflation, either directly (like Social Security) or indirectly (like Medicare). And the Treasury continually borrows and refinances the government's debt at market interest rates.

The Congressional Budget Office (CBO) has summarized some of the links between key economic assumptions and federal budget projections with three rules of thumb. Those rules generate estimates of the impact on budget totals of changes in real growth, inflation, and interest rates. The real growth rule assumes 0.1 percentage-point slower growth than CBO's baseline, starting in January 1997. The inflation and interest rate rules assume each is 1 percentage point greater than CBO's baseline, starting in January 1997. Each of the three rules is roughly symmetrical; the impact of faster growth, lower inflation, or lower interest rates would be about the same size as shown in Table D-1, but with the opposite sign. Sustained errors of 0.1 or 1 percentage point are used for the sake of simplicity; they do not represent typical forecasting errors.

Each year, CBO presents rules of thumb in its annual report. Their magnitudes always change somewhat from year to year because of the intervening growth in the economy (principally affecting revenues),

changes in interest rates, and new projections of growth in benefit programs. This year's rules, like last year's, reflect a substantial shift in emphasis. Prior to that, CBO produced estimates of the effects of different economic assumptions on projections during a six-year budget period. The estimates of the effects of changes in real growth and unemployment were generally intended to reflect possible cyclical changes in the economy. Because CBO has now begun to produce budget projections for 11 years, and because there is great interest in what the budget will look like in the later years of the projection period, CBO's approach to the rules of thumb has changed.

For instance, the current rule of thumb for real growth is an illustration of the change in the budget if the growth of potential gross domestic product (GDP) departs from the baseline, not an illustration of the effects of a cyclical change. As a result, the rule of thumb has been recast as a 0.1 percentage-point decline in real growth instead of the 1 percentage-point change assumed in the past. Although it was not unreasonable to assume that real growth could be 1 percentage point lower than CBO's baseline over the next few years because of cyclical effects, it does not seem at all realistic to assume that real growth could be as much as 1 percentage point lower than the baseline projections for the next 10 years. In addition, because the unemployment rate effect that used to be included in the real growth rule of thumb was a cyclical effect, it has been eliminated, leaving only the effect of a smaller labor force on unemployment expenditures.

Table D-1.
Effects of Selected Economic Changes on CBO Budget Projections
(By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Real Rate of Growth Is 0.1 Percentage Point a Year Lower Beginning in January 1997											
Change in Revenues	-1	-2	-4	-6	-8	-10	-13	-16	-19	-22	-25
Change in Outlays											
Net interest (Debt service)	a	a	a	1	1	2	2	3	4	6	7
Mandatory spending	a	a	a	a	a	a	a	a	a	a	a
Change in Deficit	1	2	4	6	9	12	15	19	23	28	33
Inflation Rate Is 1 Percentage Point a Year Higher Beginning in January 1997^b											
Change in Revenues	8	24	41	58	78	99	122	148	178	210	244
Change in Outlays											
Net interest											
Higher rates	5	17	24	29	33	38	41	44	48	52	56
Debt service	a	a	1	2	3	4	6	8	10	12	15
Discretionary spending	0	5	11	17	24	31	38	46	54	63	72
Mandatory spending	<u>1</u>	<u>8</u>	<u>17</u>	<u>27</u>	<u>39</u>	<u>52</u>	<u>66</u>	<u>81</u>	<u>100</u>	<u>118</u>	<u>138</u>
Total	7	30	52	75	99	124	151	179	212	245	281
Change in Deficit	-2	6	12	17	21	25	29	31	34	35	38
Interest Rates Are 1 Percentage Point a Year Higher Beginning in January 1997											
Change in Revenues	0	0	0	0	0	0	0	0	0	0	0
Change in Outlays											
Net interest											
Higher rates	5	17	24	29	33	38	41	44	48	52	56
Debt service	a	1	2	4	7	10	13	17	21	26	31
Mandatory spending	<u>a</u>	<u>1</u>	<u>a</u>	<u>a</u>	<u>a</u>	<u>a</u>	<u>a</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Total	6	18	27	34	41	48	55	62	70	78	88
Change in Deficit	6	18	27	34	41	48	55	62	70	78	88

SOURCE: Congressional Budget Office.

a. Less than \$500 million.

b. Assuming that discretionary spending grows with inflation.

As noted below, these rules of thumb are highly simplified and should be used with caution. Budget projections are also subject to other kinds of errors that are technical in nature and not directly related to economic forecasting. There is no way, however, to develop rules of thumb for those other uncertainties.

Chapter 3 of this report also examines the effect of differing economic assumptions on budget projections.

Real Growth

Strong economic growth narrows the federal budget deficit, and weak economic growth widens it. The first rule of thumb produces an estimate of the budgetary impact of economic growth that is slightly weaker than CBO's baseline assumes.

In CBO's baseline, growth of real GDP averages slightly above 2 percent a year. Subtracting 0.1 per-

centage point from the rate of real growth, beginning in January 1997, implies slightly slower growth throughout the projection period. Under that slow-growth scenario, GDP lies roughly 1 percent below CBO's baseline assumption by 2007.

The same scenario implies lower growth in taxable incomes, leading to revenue losses that mount from \$1 billion in 1997 to \$25 billion in 2007 (see Table D-1). The loss in revenues in 2007 is roughly 1 percent of baseline revenues, on a par with the loss in GDP. In addition, the government borrows more and incurs greater debt-service costs. In sum, the deficit in 2007 would be an estimated \$33 billion (or 13 percent) larger than in CBO's baseline.

Inflation

Inflation produces effects on the federal budget that largely offset each other. The second rule of thumb

Table D-2.
Effects on Budget Projections of a Change in CBO's Projection of Inflation,
Assuming Discretionary Spending Remains Level (By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Change in Revenues	8	24	41	58	78	99	122	148	178	210	244
Change in Outlays											
Net interest											
Higher rates	5	17	24	29	33	38	41	44	48	52	56
Debt service	a	a	a	a	a	-1	-2	-3	-5	-8	-12
Discretionary spending	0	0	0	0	0	0	0	0	0	0	0
Mandatory spending	1	8	17	27	39	52	66	81	100	118	138
Total	7	24	40	56	72	89	105	122	142	162	183
Change in Deficit	-2	a	a	-2	-6	-11	-17	-26	-36	-48	-61

SOURCE: Congressional Budget Office.

NOTE: Inflation is assumed to grow at a 1 percentage-point higher annual rate beginning in January 1997.

a. Less than \$500 million.

generates estimates of the budgetary impact of inflation that is 1 percentage point higher than CBO's baseline assumption. If other economic variables are not affected, higher inflation leads to larger taxable incomes and hence greater revenues. But higher inflation also boosts spending. Nearly all benefit programs would cost more, although with a lag; so would discretionary programs, unless policymakers decided to ignore the steady erosion of real budget resources. And interest rates would almost surely rise with inflation, fueling higher debt-service costs.

Higher inflation has little effect on the deficit initially, as revenues rise almost in tandem with outlays. The extra spending eventually overtakes the additional revenues, however, increasing the deficit by an estimated \$38 billion in 2007.

The effects of inflation on the budget are subtle, and varying conclusions are possible if one or two key assumptions are changed. The assumption that interest rates rise in step with inflation is crucial—it contributes \$56 billion in extra spending by 2007. The treatment of discretionary programs is also critical. Because discretionary spending is controlled by annual appropriation acts, both the appropriate method of projecting discretionary spending under current policies and the effect of inflation on those projections are ambiguous.

As discussed in Chapter 2, CBO uses two different approaches in projecting discretionary spending. Both approaches begin with the actual level of appropriations enacted in the current year—in this instance 1997. The first assumes that appropriations grow with inflation, although they will be somewhat constrained in 1998 by the statutory caps that are in place through 1998 (under the law, the caps themselves are adjusted for changes in inflation). The other approach assumes that the 1997 dollar level is appropriated each year through 2007. Under the first approach to projecting discretionary spending, a 1 percentage-point increase in inflation generates extra discretionary spending of \$5 billion in 1998 and \$72 billion in 2007 (see Table D-1). Under the second approach, inflation has no effect on discretionary spending. In that case, the assumed increase in the rate of inflation generates a reduction in the deficit of \$61 billion in 2007 (see Table D-2 on

page 93). This beneficial effect on the deficit has a hidden cost: an erosion of the real resources for discretionary programs.

Interest Rates

The final rule of thumb illustrates the sensitivity of the budget to interest rates. The Treasury finances the government's large and growing debt at market interest rates. Assuming that interest rates are 1 percentage point higher than in the baseline for all maturities in each year, while assuming all other economic variables are unchanged, would drive up interest costs by more than \$5 billion in 1997. That initial boost in interest costs is fueled largely by the extra costs of refinancing the government's short-term Treasury bills, which make up almost one-fourth of the marketable debt. More than \$750 billion worth of Treasury bills are now outstanding, all of them maturing within the next year.

The bulk of the marketable debt, however, consists of medium- and long-term securities, mainly those with initial maturities of two to 10 years. Inevitably, many of those securities will come due for refinancing over the next several years. And the Treasury continually adds new debt to finance the deficit. Thus, the budgetary effects mount as more and more debt is hit with higher interest rates. By 2007, the vast majority of the debt would be affected. Of the marketable debt outstanding at the end of that year, CBO estimates that more than 38 percent would have been originally borrowed in the 1997-2007 period and therefore would be affected by higher rates. About 53 percent would have been outstanding in early 1997 and then refinanced during the 1997-2007 period. Only about 9 percent of the debt would be unaffected by higher interest rates. As a result of the rise in interest rates, the deficit in 2007 would increase by \$88 billion.

This rule of thumb incorporates small changes in other interest-sensitive spending, primarily student loans, but it does not include any possible effects on revenues of such a large change in interest rates. In CBO's calculation of the economic effects of deficit reduction, the drop in interest rates caused by deficit

reduction is assumed to reduce interest income, increase corporate profits, and reduce Federal Reserve earnings. On balance, such changes result in higher revenues. Higher interest rates, conversely, would result in lower revenues. Those economic effects are omitted from this

rule of thumb because many users of these rules are interested in only the direct effect of higher interest rates on the deficit, excluding effects on income shares and other macroeconomic variables.

The Federal Sector of the National Income and Product Accounts

In addition to the usual budget presentation, the economic influence of federal government revenues and spending can be portrayed through the national income and product accounts (NIPAs). The NIPAs provide a picture of government activity in terms of production, distribution, and use of output. That approach recasts the government's transactions into categories that affect gross domestic product, income, and other macroeconomic totals, thereby helping to trace the relationship between the federal sector and other areas of the economy.

Relationship Between the Budget and the NIPAs

A handful of major differences distinguish the NIPA version of federal receipts and expenditures from its budgetary counterpart. One example is the shift of selected dollars from the spending to the receipts side of the budget. Such shifts are referred to as *netting and grossing* adjustments. For the most part, they affect receipts that the budget records as negative outlays because they are either voluntary or intrabudgetary in nature and are not considered results of the government's taxing power. To give a more comprehensive picture of receipts from all sources in the economy, the NIPAs shift those negative outlays from the expenditures to the receipts side of the ledger (see Table E-1). That

shift does not affect the deficit. The vast majority of netting and grossing adjustments are voluntary premiums for Medicare coverage (\$20 billion in 1997) and intrabudgetary receipts for retirement contributions on behalf of federal workers (\$68 billion in 1997).

By contrast, other differences between the federal budget and the NIPAs do affect the deficit. The NIPA totals exclude transactions that involve the transfer of existing assets and liabilities and therefore do not contribute to current income and production. Prominent among such *lending and financial* adjustments are those for deposit insurance outlays, cash flows for direct loans made by the government before credit reform, and sales of government assets. Those contribute an average of \$15 billion a year in 1997 and 1998. Other factors driving a wedge between budget and NIPA deficit accounting include *geographic* adjustments (the exclusion of Puerto Rico, the Virgin Islands, and a few other areas from the national economic statistics) and *timing* adjustments (such as correcting for irregular numbers of benefit checks, paychecks, or Medicare payments to health maintenance organizations because of calendar quirks).

Another difference between the NIPA and unified budgets lies in their differing treatment of *investment and capital consumption*. The unified budget includes all expenditures of the federal government, including investment purchases such as buildings and aircraft carriers. The NIPA budget shows the current or operat-

Table E-1.
Relationship of the Budget to the Federal Sector of the
National Income and Product Accounts (By fiscal year, in billions of dollars)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Receipts												
Revenue (Budget basis)*	1,453	1,507	1,567	1,634	1,705	1,781	1,860	1,943	2,033	2,127	2,227	2,333
Differences												
Netting and grossing												
Government contributions for employee retirement	66	68	69	71	74	77	81	84	88	92	96	100
Medicare premiums	20	20	21	22	23	24	26	27	28	29	31	32
Deposit insurance premiums	2	2	2	2	2	2	2	2	2	2	2	2
Other	2	2	1	-1	-1	-1	-1	-2	-4	-4	-5	-6
Geographic exclusions	-2	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3
Other	4	2	1	1	1	1	1	1	2	2	2	2
Total	91	92	93	94	97	101	106	110	114	118	123	127
Receipts (NIPA basis)	1,544	1,600	1,659	1,728	1,802	1,882	1,966	2,053	2,147	2,245	2,349	2,460
Expenditures												
Outlays (Budget basis)*	1,560	1,632	1,687	1,781	1,877	1,948	2,049	2,145	2,252	2,381	2,492	2,611
Differences												
Netting and grossing												
Government contributions for employee retirement	66	68	69	71	74	77	81	84	88	92	96	100
Medicare premiums	20	20	21	22	23	24	26	27	28	29	31	32
Deposit insurance premiums	2	2	2	2	2	2	2	2	2	2	2	2
Other	2	2	1	-1	-1	-1	-1	-2	-4	-4	-5	-6
Lending and financial transactions												
Deposit insurance	8	9	1	b	-2	-3	-3	-3	-2	-2	-2	-2
Other	8	8	13	4	b	-1	-1	-2	-3	-2	-3	-3
Defense timing adjustment	5	5	1	1	1	1	1	1	1	1	1	b
Geographic exclusions	-8	-8	-8	-9	-9	-10	-10	-11	-11	-12	-12	-13
Treatment of investment and capital consumption	8	4	2	-1	-3	-6	-8	-11	-13	-16	-18	-21
Transfer timing adjustments	5	0	0	0	-8	8	0	0	0	-16	-2	17
Other	8	5	4	4	b	8	4	4	4	1	4	5
Total	123	116	106	94	78	101	90	91	90	73	92	111
Expenditures (NIPA basis)	1,683	1,747	1,793	1,875	1,954	2,049	2,139	2,236	2,343	2,454	2,584	2,721
Deficit												
Deficit (Budget basis)*	107	124	120	147	171	167	188	202	219	254	266	278
Differences												
Lending and financial transactions	16	17	14	3	-2	-4	-5	-5	-5	-5	-5	-5
Defense timing adjustment	5	5	1	1	1	1	1	1	1	1	1	b
Geographic exclusions	-6	-6	-6	-6	-7	-7	-8	-8	-9	-9	-10	-10
Treatment of investment and capital consumption	8	4	2	-1	-3	-6	-8	-11	-13	-16	-18	-21
Transfer timing adjustments	5	0	0	0	-8	8	0	0	0	-16	-2	17
Other	4	2	3	3	b	6	3	3	2	-1	3	3
Total	32	23	14	b	-19	b	-16	-19	-23	-45	-31	-17
Deficit (NIPA basis)	139	147	134	148	152	167	172	183	196	209	235	261

SOURCE: Congressional Budget Office.

a. Includes Social Security and the Postal Service.

b. Less than \$500 million.

ing account for the federal government; consequently, government investment is left out and government's consumption of fixed capital (depreciation) is included. (Government investment does not disappear but is classed along with private investment rather than in the government accounts.) The inclusion of depreciation in the NIPA budget parallels the treatment of the private sector. The Congressional Budget Office (CBO) estimates that consumption of capital will be \$4 billion greater than new investment in 1997, but by 1999 capital consumption will be smaller than investment. That trend is expected to continue: in 2007 the difference will decrease the NIPA deficit by \$21 billion in relation to the unified deficit.

In the early and mid-1980s, the NIPA deficit and the unified budget deficit generally paralleled each other, and the NIPA deficit was several billion dollars lower than its budgetary counterpart (see Figure E-1). Since then, the difference between the two has fluctuated widely because of large swings in lending and financial exclusions. For example, sizable deposit insurance outlays in 1989 through 1991 significantly wid-

ened the gap between the NIPA and unified budget deficits. Since 1992, when deposit insurance spending plummeted, the gap between the NIPA and unified measures has narrowed. In CBO's new projections, the NIPA deficit will be \$23 billion greater than the unified deficit in 1997, but once the effects of deposit insurance and asset sales end by 2000, the NIPA deficit will be smaller than the unified deficit.

NIPA Receipts and Expenditures

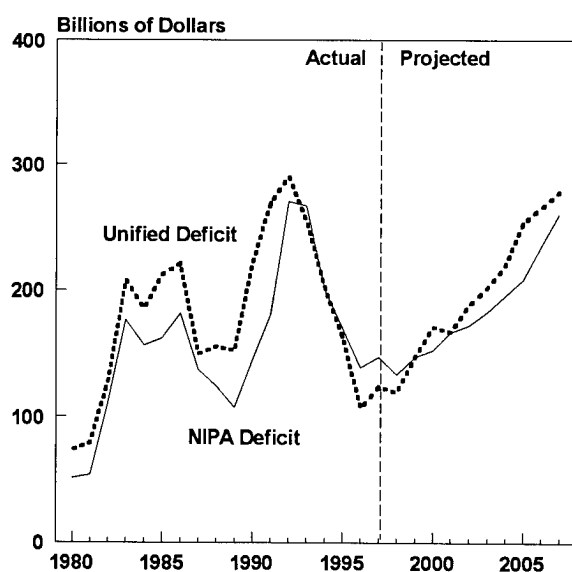
The federal sector of the NIPAs generally classifies receipts according to their source and expenditures according to their purpose and destination (see Table E-2).

The leading source of receipts for the federal government in the 1997-2007 period is taxes and fees paid by individuals. Following that category closely are contributions (including premiums) for social insurance, such as Social Security, Medicare, unemployment insurance, and federal employees' retirement. The two categories are expected to raise around \$690 billion and \$625 billion, respectively, in 1997. The remaining categories are accruals of taxes on corporate profits, including the earnings of the Federal Reserve System, and indirect business tax (chiefly excise tax) and nontax (chiefly fee) accruals.

Government expenditures are classified according to their purpose and destination. Defense and nondefense consumption of goods and services are purchases made by the government for immediate use. The largest share of current consumption is compensation of federal employees. Consumption of fixed government capital (depreciation) is the use the government gets from its fixed assets.

Transfer payments are cash payments made directly to people or foreign nations. Grants-in-aid are payments made by the federal government to state or local governments. They are then used by the states or localities for transfers (such as Medicaid), consumption (such as school lunches), or investment (such as highway construction).

Figure E-1.
A Comparison of NIPA and Unified Budget
Deficits, Fiscal Years 1980-2007



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: NIPA = national income and product account.

Table E-2.
Projections of Baseline Receipts and Expenditures Measured by the
National Income and Product Accounts (By fiscal year, in billions of dollars)

	Actual 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Receipts												
Personal Tax and Nontax Receipts	656	692	724	758	796	837	878	922	971	1,019	1,069	1,124
Corporate Profits Tax Accruals	194	193	198	201	203	207	213	221	231	241	252	264
Indirect Business Tax and Nontax Accruals	86	89	89	93	98	102	105	108	109	111	113	116
Contributions for Social Insurance	<u>607</u>	<u>626</u>	<u>648</u>	<u>676</u>	<u>706</u>	<u>736</u>	<u>769</u>	<u>803</u>	<u>837</u>	<u>875</u>	<u>915</u>	<u>957</u>
Total	1,544	1,600	1,659	1,728	1,802	1,882	1,966	2,053	2,147	2,245	2,349	2,460
Expenditures												
Consumption	243	242	238	243	248	255	262	269	277	284	292	301
Defense consumption	59	59	61	61	62	63	64	66	67	69	70	72
Consumption of fixed defense capital	144	145	149	158	165	173	179	182	188	194	199	203
Nondefense consumption	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>13</u>	<u>13</u>	<u>14</u>	<u>14</u>
Consumption of fixed nondefense capital	457	457	458	474	488	504	517	530	544	559	575	590
Subtotal	457	457	458	474	488	504	517	530	544	559	575	590
Transfer Payments	738	780	821	870	920	972	1,028	1,087	1,151	1,219	1,296	1,378
Domestic	<u>14</u>	<u>14</u>	<u>13</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>16</u>	<u>16</u>
Foreign	752	794	834	884	934	986	1,042	1,101	1,166	1,234	1,311	1,394
Subtotal	752	794	834	884	934	986	1,042	1,101	1,166	1,234	1,311	1,394
Grants-in-Aid to State and Local Government	211	224	238	250	262	274	289	304	321	340	360	381
Net Interest	232	237	240	247	251	256	263	272	282	293	305	319
Subsidies Less Current Surplus of Government Enterprises	30	36	39	34	35	36	37	37	38	39	41	43
Required Reductions in Discretionary Spending ^a	<u>n.a.</u>	<u>n.a.</u>	<u>-15</u>	<u>-14</u>	<u>-15</u>	<u>-7</u>	<u>-9</u>	<u>-9</u>	<u>-9</u>	<u>-12</u>	<u>-8</u>	<u>-5</u>
Total	1,683	1,747	1,793	1,875	1,954	2,049	2,139	2,236	2,343	2,454	2,584	2,721
Deficit												
Deficit	139	147	134	148	152	167	172	183	196	209	235	261

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Unspecified reductions needed to comply with the statutory cap on discretionary spending in 1998.

Although both the budget and the NIPAs contain a category labeled "net interest," the NIPA figure is smaller. A variety of differences cause the two measures to diverge. The largest is the contrasting treatment of interest received on late payments of personal and business taxes. In the budget, both types of payments are counted on the revenue side, as individual income taxes and corporate income taxes, respectively. In the NIPAs, those differences appear as offsets to federal interest payments, thereby lowering net interest payments by \$14 billion to \$21 billion each year through 2007.

The category labeled "subsidies less current surplus of government enterprises" contains two components, as its name suggests. The first—subsidies—is defined as monetary grants paid by government to businesses, including state and local government enterprises such as public housing. Subsidies are dominated by housing assistance, which accounts for approximately two-thirds of 1997 subsidy expenditures.

The second portion of the category is the current surplus of government enterprises. Government enterprises are certain business-type operations of the government—for example, the Postal Service. The operating costs of government enterprises are mostly covered

by the sale of goods and services to the public rather than by tax receipts. The difference between sales and current operating expenses is the enterprise's surplus or deficit. *Government enterprises* should not be confused with *government-sponsored enterprises* (GSEs), private entities established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency. Examples of GSEs include the Federal National Mortgage Association (Fannie Mae) and the Student Loan Marketing Association (Sallie Mae). As privately owned organizations, GSEs are not included in the budget or in the federal sector of the NIPAs.

A final category under expenditures is required reductions in discretionary spending (see Table E-2). That is not a category in the NIPAs but an accounting for policy changes that must be made in the future. Policymakers must comply with the 1998 spending cap but may do so in any number of ways. Unspecified savings of \$15 billion in 1998 and similar amounts thereafter will thus be required. Those savings cannot be assigned to particular NIPA categories; however, they are most likely to come from defense and nondefense consumption and grants to states and local governments.

Historical Budget Data

This appendix provides historical data for revenues, outlays, and the deficit. Estimates of the standardized-employment deficit and its revenue and outlay components for fiscal years 1956 through 1996 are reported in Tables F-1 through F-3, along with estimates of potential gross domestic product (GDP), actual GDP, and the nonaccelerating inflation rate of unemployment (NAIRU). The standardized-employment deficit and its components are also shown as a percentage of potential GDP.

As discussed in Chapter 1, the change in the standardized-employment deficit is a commonly used measure of the short-term impact of discretionary fiscal policy on total demand. The standardized-employment deficit—which is often called the structural deficit—excludes the effects on revenues and outlays of cyclical fluctuations in output and unemployment. More specifically, standardized-employment revenues are the federal revenues that would be collected if the economy was operating at its potential level of GDP. Those revenues are greater than actual revenues when GDP is below its potential level, because the tax bases are then cyclically depressed. Standardized-employment outlays are the federal outlays that would be recorded if the economy was operating at an unemployment rate consistent with stable inflation—the NAIRU, which is also the benchmark used to compute potential GDP. Standardized outlays are less than actual outlays when the rate of unemployment is higher than the NAIRU, because transfer payments for unemployment insurance and other programs are then cyclically swollen.

Budget data consistent with the budget projections in Chapter 2 are available for fiscal years 1962 through

1996 and are reported in Tables F-4 through F-13. The data are shown both in nominal dollars and as a percentage of gross domestic product.

Federal revenues, outlays, deficit or surplus, and debt held by the public are shown in Tables F-4 and F-5. Revenues, outlays, and the deficit have both on-budget and off-budget components. Social Security receipts and outlays were placed off-budget by the Balanced Budget and Emergency Deficit Control Act of 1985; the Postal Service was moved off-budget, beginning in 1989, by the Omnibus Budget Reconciliation Act of 1989.

The major sources of federal revenues (including off-budget revenues) are presented in Tables F-6 and F-7. Social insurance taxes and contributions include employer and employee payments for Social Security, Medicare, Railroad Retirement, and unemployment insurance, and pension contributions by federal workers. Excise taxes are levied on certain products and services such as gasoline, alcoholic beverages, and air travel. Miscellaneous receipts consist of deposits of earnings by the Federal Reserve System and numerous fees and charges.

Total on- and off-budget outlays for major spending categories are shown in Tables F-8 and F-9. In order to compare historical outlays with the projections discussed in Chapter 2, the historical data have been divided into the same categories of spending as the projections. Spending controlled by the appropriation process is classified as discretionary. Tables F-10 and F-11 divide discretionary spending into its defense, international, and domestic components. Entitlements and

other mandatory spending include programs for which spending is governed by laws making those who meet certain requirements eligible to receive payments. Additional detail on entitlement programs is shown in Tables F-12 and F-13. Deposit insurance represents the net costs of dealing with insolvent banks and savings and loan institutions; such outlays were especially volatile beginning in 1988. Net interest is identical to the budget function with the same name (function 900).

Offsetting receipts include the federal government's contribution toward employee retirement, fees and charges such as Medicare premiums, and receipts from the use of federally controlled land and offshore territory. In 1991 and 1992, that category was swelled by contributions from allied nations to help pay the costs of Operation Desert Storm.

Table F-1.
Deficits, Debt, and Related Series, Fiscal Years 1956-1996

	In Billions of Dollars			As a Percentage of GDP			GDP (Billions of dollars)		NAIRU ^d (Percent)
	Deficit	Standardized- Employment Deficit ^a	Debt Held by the Public	Deficit	Standardized- Employment Deficit ^{a,b}	Debt Held by the Public	Actual ^c	Potential	
1956	4	e	222	0.9	f	52.0	427	414	5.5
1957	3	e	219	0.8	f	48.7	451	440	5.5
1958	-3	-2	226	-0.6	-0.4	49.3	459	466	5.5
1959	-13	-11	235	-2.6	-2.2	47.9	490	494	5.5
1960	e	e	237	0.1	-0.1	45.6	519	519	5.5
1961	-3	1	238	-0.6	0.2	45.0	530	546	5.6
1962	-7	-5	248	-1.3	-0.9	43.7	568	574	5.6
1963	-5	-4	254	-0.8	-0.7	42.4	599	604	5.6
1964	-6	-8	257	-0.9	-1.2	40.1	641	635	5.6
1965	-1	-6	261	-0.2	-0.9	38.0	687	671	5.7
1966	-4	-15	264	-0.5	-2.1	34.9	756	717	5.8
1967	-9	-20	267	-1.1	-2.6	32.9	810	774	5.8
1968	-25	-36	290	-2.9	-4.3	33.3	870	840	5.8
1969	3	-11	278	0.3	-1.1	29.3	948	914	5.9
1970	-3	-11	283	-0.3	-1.1	28.1	1,010	1,001	5.9
1971	-23	-22	303	-2.1	-2.0	28.1	1,078	1,089	5.9
1972	-23	-24	322	-2.0	-2.0	27.4	1,175	1,179	6.0
1973	-15	-27	341	-1.1	-2.1	26.0	1,310	1,270	6.1
1974	-6	-18	344	-0.4	-1.2	23.9	1,438	1,409	6.2
1975	-53	-38	395	-3.4	-2.4	25.4	1,554	1,611	6.2
1976	-74	-55	477	-4.3	-3.1	27.6	1,733	1,781	6.2
1977	-54	-47	549	-2.7	-2.4	27.8	1,972	1,983	6.2
1978	-59	-63	607	-2.7	-2.9	27.4	2,214	2,200	6.3
1979	-41	-51	640	-1.6	-2.1	25.6	2,498	2,476	6.3
1980	-74	-58	710	-2.7	-2.1	26.1	2,719	2,782	6.3
1981	-79	-56	785	-2.6	-1.8	25.8	3,048	3,119	6.2
1982	-128	-69	920	-4.0	-2.0	28.6	3,214	3,419	6.2
1983	-208	-134	1,132	-6.1	-3.7	33.1	3,422	3,653	6.1
1984	-185	-165	1,300	-4.9	-4.2	34.0	3,820	3,891	6.1
1985	-212	-200	1,500	-5.2	-4.8	36.5	4,108	4,139	6.1
1986	-221	-208	1,737	-5.1	-4.7	39.8	4,368	4,389	6.0
1987	-150	-135	1,889	-3.2	-2.9	41.0	4,609	4,651	6.0
1988	-155	-149	2,051	-3.1	-3.0	41.4	4,957	4,949	6.0
1989	-152	-150	2,190	-2.8	-2.8	40.9	5,355	5,300	6.0
1990	-221	-177	2,411	-3.9	-3.1	42.4	5,683	5,659	6.0
1991	-269	-202	2,688	-4.6	-3.3	45.9	5,861	6,025	5.9
1992	-290	-239	2,999	-4.7	-3.8	48.8	6,149	6,311	5.9
1993	-255	-246	3,247	-3.9	-3.7	50.1	6,477	6,578	5.9
1994	-203	-197	3,432	-3.0	-2.9	50.2	6,837	6,851	5.8
1995	-164	-199	3,603	-2.3	-2.8	50.1	7,187	7,166	5.8
1996	-107	-127	3,733	-1.4	-1.7	49.9	7,484	7,480	5.8

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

- Excludes deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).
- The standardized-employment deficit is shown as a percentage of potential GDP.
- Values for 1956 through 1960 are estimated by CBO.
- The NAIRU is the nonaccelerating inflation rate of unemployment. It is the benchmark for computing potential GDP.
- Less than \$500 million.
- Less than 0.05 percent.

Table F-2.
Standardized-Employment Deficit and Related Series,
Fiscal Years 1956-1996 (In billions of dollars)

	Budget Deficit	Cyclical Deficit	Other Adjustments ^a	Standardized-Employment		
				Deficit	Revenues	Outlays
1956	4	-4	0	b	72	72
1957	3	-4	0	b	78	78
1958	-3	1	0	-2	81	82
1959	-13	2	0	-11	80	91
1960	b	-1	0	b	92	93
1961	-3	4	0	1	98	97
1962	-7	2	b	-5	101	106
1963	-5	1	b	-4	108	112
1964	-6	-1	b	-8	111	119
1965	-1	-4	b	-6	114	120
1966	-4	-11	b	-15	123	138
1967	-9	-11	b	-20	142	162
1968	-25	-10	-1	-36	147	183
1969	3	-13	-1	-11	180	190
1970	-3	-7	-1	-11	191	202
1971	-23	2	b	-22	189	211
1972	-23	b	-1	-24	208	232
1973	-15	-11	-1	-27	223	250
1974	-6	-11	-1	-18	257	275
1975	-53	15	1	-38	290	328
1976	-74	19	-1	-55	307	362
1977	-54	8	-2	-47	358	405
1978	-59	-3	-1	-63	397	460
1979	-41	-8	-3	-51	459	510
1980	-74	17	b	-58	530	588
1981	-79	24	-1	-56	614	670
1982	-128	61	-2	-69	658	728
1983	-208	73	1	-134	644	778
1984	-185	23	-3	-165	679	844
1985	-212	14	-2	-200	740	940
1986	-221	12	2	-208	773	981
1987	-150	12	3	-135	863	998
1988	-155	-6	12	-149	908	1,057
1989	-152	-19	22	-150	979	1,129
1990	-221	-11	55	-177	1,027	1,204
1991	-269	45	23	-202	1,090	1,291
1992	-290	54	-2	-239	1,125	1,363
1993	-255	37	-28	-246	1,176	1,421
1994	-203	9	-3	-197	1,262	1,459
1995	-164	-10	-25	-199	1,347	1,546
1996	-107	-6	-14	-127	1,452	1,579

SOURCE: Congressional Budget Office.

a. Consists of deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

b. Less than \$500 million.

Table F-3.
Standardized-Employment Deficit and Related Series,
Fiscal Years 1956-1996 (As a percentage of potential GDP)

	Budget Deficit ^a	Cyclical Deficit	Other Adjustments ^b	Standardized-Employment		
				Deficit	Revenues	Outlays
1956	0.9	-1.0	0	c	17.4	17.4
1957	0.8	-0.8	0	c	17.7	17.8
1958	-0.6	0.2	0	-0.4	17.3	17.7
1959	-2.6	0.4	0	-2.2	16.2	18.3
1960	0.1	-0.1	0	-0.1	17.8	17.9
1961	-0.6	0.8	0	0.2	17.9	17.7
1962	-1.3	0.4	-0.1	-0.9	17.6	18.5
1963	-0.8	0.2	-0.1	-0.7	17.8	18.5
1964	-0.9	-0.2	-0.1	-1.2	17.5	18.8
1965	-0.2	-0.7	-0.1	-0.9	16.9	17.9
1966	-0.5	-1.5	-0.1	-2.1	17.2	19.3
1967	-1.1	-1.4	-0.1	-2.6	18.3	20.9
1968	-2.9	-1.2	-0.1	-4.3	17.5	21.8
1969	0.3	-1.4	-0.1	-1.1	19.7	20.8
1970	-0.3	-0.7	-0.1	-1.1	19.1	20.1
1971	-2.1	0.1	c	-2.0	17.4	19.4
1972	-2.0	c	-0.1	-2.0	17.6	19.7
1973	-1.1	-0.9	-0.1	-2.1	17.5	19.7
1974	-0.4	-0.8	c	-1.2	18.3	19.5
1975	-3.4	0.9	c	-2.4	18.0	20.3
1976	-4.3	1.1	c	-3.1	17.3	20.4
1977	-2.7	0.4	-0.1	-2.4	18.0	20.4
1978	-2.7	-0.1	c	-2.9	18.0	20.9
1979	-1.6	-0.3	-0.1	-2.1	18.5	20.6
1980	-2.7	0.6	c	-2.1	19.1	21.1
1981	-2.6	0.8	c	-1.8	19.7	21.5
1982	-4.0	1.8	-0.1	-2.0	19.3	21.3
1983	-6.1	2.0	c	-3.7	17.6	21.3
1984	-4.9	0.6	-0.1	-4.2	17.5	21.7
1985	-5.2	0.3	-0.1	-4.8	17.9	22.7
1986	-5.1	0.3	c	-4.7	17.6	22.3
1987	-3.2	0.3	0.1	-2.9	18.6	21.5
1988	-3.1	-0.1	0.2	-3.0	18.3	21.4
1989	-2.8	-0.4	0.4	-2.8	18.5	21.3
1990	-3.9	-0.2	1.0	-3.1	18.1	21.3
1991	-4.6	0.7	0.4	-3.3	18.1	21.4
1992	-4.7	0.9	c	-3.8	17.8	21.6
1993	-3.9	0.6	-0.4	-3.7	17.9	21.6
1994	-3.0	0.1	c	-2.9	18.4	21.3
1995	-2.3	-0.1	-0.3	-2.8	18.8	21.6
1996	-1.4	-0.1	-0.2	-1.7	19.4	21.1

SOURCE: Congressional Budget Office.

a. The budget deficit is shown as a percentage of actual GDP.

b. Consists of deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

c. Less than 0.05 percent.

Table F-4.
Revenues, Outlays, Deficits, and Debt Held by the Public,
Fiscal Years 1962-1996 (In billions of dollars)

	Revenues	Outlays	Deficit (-) or Surplus			Total	Debt Held by the Public ^a
			On-Budget	Social Security	Postal Service		
1962	99.7	106.8	-5.9	-1.3	b	-7.1	248.0
1963	106.6	111.3	-4.0	-0.8	b	-4.8	254.0
1964	112.6	118.5	-6.5	0.6	b	-5.9	256.8
1965	116.8	118.2	-1.6	0.2	b	-1.4	260.8
1966	130.8	134.5	-3.1	-0.6	b	-3.7	263.7
1967	148.8	157.5	-12.6	4.0	b	-8.6	266.6
1968	153.0	178.1	-27.7	2.6	b	-25.2	289.5
1969	186.9	183.6	-0.5	3.7	b	3.2	278.1
1970	192.8	195.6	-8.7	5.9	b	-2.8	283.2
1971	187.1	210.2	-26.1	3.0	b	-23.0	303.0
1972	207.3	230.7	-26.4	3.0	b	-23.4	322.4
1973	230.8	245.7	-15.4	0.5	b	-14.9	340.9
1974	263.2	269.4	-8.0	1.8	b	-6.1	343.7
1975	279.1	332.3	-55.3	2.0	b	-53.2	394.7
1976	298.1	371.8	-70.5	-3.2	b	-73.7	477.4
1977	355.6	409.2	-49.8	-3.9	b	-53.7	549.1
1978	399.6	458.7	-54.9	-4.3	b	-59.2	607.1
1979	463.3	504.0	-38.7	-2.0	b	-40.7	640.3
1980	517.1	590.9	-72.7	-1.1	b	-73.8	709.8
1981	599.3	678.2	-74.0	-5.0	b	-79.0	785.3
1982	617.8	745.8	-120.1	-7.9	b	-128.0	919.8
1983	600.6	808.4	-208.0	0.2	b	-207.8	1,131.6
1984	666.5	851.9	-185.7	0.3	b	-185.4	1,300.5
1985	734.2	946.5	-221.7	9.4	b	-212.3	1,499.9
1986	769.3	990.5	-238.0	16.7	b	-221.2	1,736.7
1987	854.4	1,004.2	-169.3	19.6	b	-149.8	1,888.7
1988	909.3	1,064.5	-194.0	38.8	b	-155.2	2,050.8
1989	991.2	1,143.7	-205.2	52.4	0.3	-152.5	2,189.9
1990	1,032.0	1,253.2	-277.8	58.2	-1.6	-221.2	2,410.7
1991	1,055.0	1,324.4	-321.6	53.5	-1.3	-269.4	2,688.1
1992	1,091.3	1,381.7	-340.5	50.7	-0.7	-290.4	2,998.8
1993	1,154.4	1,409.4	-300.4	46.8	-1.4	-255.1	3,247.5
1994	1,258.6	1,461.7	-258.8	56.8	-1.1	-203.1	3,432.1
1995	1,351.8	1,515.7	-226.3	60.4	2.0	-163.9	3,603.4
1996	1,452.8	1,560.1	-174.4	66.4	0.6	-107.3	3,733.0

SOURCE: Congressional Budget Office.

a. End of year.

b. In fiscal years 1962 through 1988, the Postal Service was on-budget and included in the on-budget total.

Table F-5.
Revenues, Outlays, Deficits, and Debt Held by the Public,
Fiscal Years 1962-1996 (As a percentage of GDP)

	Revenues	Outlays	Deficit (-) or Surplus			Total	Debt Held by the Public ^a
			On-Budget	Social Security	Postal Service		
1962	17.6	18.8	-1.0	-0.2	b	-1.3	43.7
1963	17.8	18.6	-0.7	-0.1	b	-0.8	42.4
1964	17.6	18.5	-1.0	0.1	b	-0.9	40.1
1965	17.0	17.2	-0.2	c	b	-0.2	38.0
1966	17.3	17.8	-0.4	-0.1	b	-0.5	34.9
1967	18.4	19.4	-1.6	0.5	b	-1.1	32.9
1968	17.6	20.5	-3.2	0.3	b	-2.9	33.3
1969	19.7	19.4	-0.1	0.4	b	0.3	29.3
1970	19.1	19.4	-0.9	0.6	b	-0.3	28.1
1971	17.4	19.5	-2.4	0.3	b	-2.1	28.1
1972	17.6	19.6	-2.2	0.3	b	-2.0	27.4
1973	17.6	18.8	-1.2	c	b	-1.1	26.0
1974	18.3	18.7	-0.6	0.1	b	-0.4	23.9
1975	18.0	21.4	-3.6	0.1	b	-3.4	25.4
1976	17.2	21.5	-4.1	-0.2	b	-4.3	27.6
1977	18.0	20.8	-2.5	-0.2	b	-2.7	27.8
1978	18.0	20.7	-2.5	-0.2	b	-2.7	27.4
1979	18.5	20.2	-1.6	-0.1	b	-1.6	25.6
1980	19.0	21.7	-2.7	c	b	-2.7	26.1
1981	19.7	22.3	-2.4	-0.2	b	-2.6	25.8
1982	19.2	23.2	-3.7	-0.2	b	-4.0	28.6
1983	17.5	23.6	-6.1	c	b	-6.1	33.1
1984	17.4	22.3	-4.9	c	b	-4.9	34.0
1985	17.9	23.0	-5.4	0.2	b	-5.2	36.5
1986	17.6	22.7	-5.4	0.4	b	-5.1	39.8
1987	18.5	21.8	-3.7	0.4	b	-3.2	41.0
1988	18.3	21.5	-3.9	0.8	b	-3.1	41.4
1989	18.5	21.4	-3.8	1.0	c	-2.8	40.9
1990	18.2	22.1	-4.9	1.0	c	-3.9	42.4
1991	18.0	22.6	-5.5	0.9	c	-4.6	45.9
1992	17.7	22.5	-5.5	0.8	c	-4.7	48.8
1993	17.8	21.8	-4.6	0.7	c	-3.9	50.1
1994	18.4	21.4	-3.8	0.8	c	-3.0	50.2
1995	18.8	21.1	-3.1	0.9	c	-2.3	50.1
1996	19.4	20.8	-2.3	0.9	c	-1.4	49.9

SOURCE: Congressional Budget Office.

a. End of year.

b. In fiscal years 1962 through 1988, the Postal Service was on-budget and included in the on-budget total.

c. Less than 0.05 percent.

Table F-6.
Revenues by Major Source, Fiscal Years 1962-1996 (In billions of dollars)

	Individual Income Taxes	Corporate Income Taxes	Social Insurance Taxes	Excise Taxes	Estate and Gift Taxes	Customs Duties	Miscel- laneous Receipts	Total Revenues
1962	45.6	20.5	17.0	12.5	2.0	1.1	0.8	99.7
1963	47.6	21.6	19.8	13.2	2.2	1.2	1.0	106.6
1964	48.7	23.5	22.0	13.7	2.4	1.3	1.1	112.6
1965	48.8	25.5	22.2	14.6	2.7	1.4	1.6	116.8
1966	55.4	30.1	25.5	13.1	3.1	1.8	1.9	130.8
1967	61.5	34.0	32.6	13.7	3.0	1.9	2.1	148.8
1968	68.7	28.7	33.9	14.1	3.1	2.0	2.5	153.0
1969	87.2	36.7	39.0	15.2	3.5	2.3	2.9	186.9
1970	90.4	32.8	44.4	15.7	3.6	2.4	3.4	192.8
1971	86.2	26.8	47.3	16.6	3.7	2.6	3.9	187.1
1972	94.7	32.2	52.6	15.5	5.4	3.3	3.6	207.3
1973	103.2	36.2	63.1	16.3	4.9	3.2	3.9	230.8
1974	119.0	38.6	75.1	16.8	5.0	3.3	5.4	263.2
1975	122.4	40.6	84.5	16.6	4.6	3.7	6.7	279.1
1976	131.6	41.4	90.8	17.0	5.2	4.1	8.0	298.1
1977	157.6	54.9	106.5	17.5	7.3	5.2	6.5	355.6
1978	181.0	60.0	121.0	18.4	5.3	6.6	7.4	399.6
1979	217.8	65.7	138.9	18.7	5.4	7.4	9.3	463.3
1980	244.1	64.6	157.8	24.3	6.4	7.2	12.7	517.1
1981	285.9	61.1	182.7	40.8	6.8	8.1	13.8	599.3
1982	297.7	49.2	201.5	36.3	8.0	8.9	16.2	617.8
1983	288.9	37.0	209.0	35.3	6.1	8.7	15.6	600.6
1984	298.4	56.9	239.4	37.4	6.0	11.4	17.1	666.5
1985	334.5	61.3	265.2	36.0	6.4	12.1	18.6	734.2
1986	349.0	63.1	283.9	32.9	7.0	13.3	20.1	769.3
1987	392.6	83.9	303.3	32.5	7.5	15.1	19.6	854.4
1988	401.2	94.5	334.3	35.2	7.6	16.2	20.3	909.3
1989	445.7	103.3	359.4	34.4	8.7	16.3	23.3	991.2
1990	466.9	93.5	380.0	35.3	11.5	16.7	28.0	1,032.0
1991	467.8	98.1	396.0	42.4	11.1	15.9	23.6	1,055.0
1992	476.0	100.3	413.7	45.6	11.1	17.4	27.3	1,091.3
1993	509.7	117.5	428.3	48.1	12.6	18.8	19.5	1,154.4
1994	543.1	140.4	461.5	55.2	15.2	20.1	23.2	1,258.6
1995	590.2	157.0	484.5	57.5	14.8	19.3	28.6	1,351.8
1996	656.4	171.8	509.4	54.0	17.2	18.7	25.2	1,452.8

SOURCE: Congressional Budget Office.

Table F-7.
Revenues by Major Source, Fiscal Years 1962-1996 (As a percentage of GDP)

	Individual Income Taxes	Corporate Income Taxes	Social Insurance Taxes	Excise Taxes	Estate and Gift Taxes	Customs Duties	Miscel- laneous Receipts	Total Revenues
1962	8.0	3.6	3.0	2.2	0.4	0.2	0.1	17.6
1963	7.9	3.6	3.3	2.2	0.4	0.2	0.2	17.8
1964	7.6	3.7	3.4	2.1	0.4	0.2	0.2	17.6
1965	7.1	3.7	3.2	2.1	0.4	0.2	0.2	17.0
1966	7.3	4.0	3.4	1.7	0.4	0.2	0.2	17.3
1967	7.6	4.2	4.0	1.7	0.4	0.2	0.3	18.4
1968	7.9	3.3	3.9	1.6	0.4	0.2	0.3	17.6
1969	9.2	3.9	4.1	1.6	0.4	0.2	0.3	19.7
1970	9.0	3.3	4.4	1.6	0.4	0.2	0.3	19.1
1971	8.0	2.5	4.4	1.5	0.3	0.2	0.4	17.4
1972	8.1	2.7	4.5	1.3	0.5	0.3	0.3	17.6
1973	7.9	2.8	4.8	1.2	0.4	0.2	0.3	17.6
1974	8.3	2.7	5.2	1.2	0.4	0.2	0.4	18.3
1975	7.9	2.6	5.4	1.1	0.3	0.2	0.4	18.0
1976	7.6	2.4	5.2	1.0	0.3	0.2	0.5	17.2
1977	8.0	2.8	5.4	0.9	0.4	0.3	0.3	18.0
1978	8.2	2.7	5.5	0.8	0.2	0.3	0.3	18.0
1979	8.7	2.6	5.6	0.8	0.2	0.3	0.4	18.5
1980	9.0	2.4	5.8	0.9	0.2	0.3	0.5	19.0
1981	9.4	2.0	6.0	1.3	0.2	0.3	0.5	19.7
1982	9.3	1.5	6.3	1.1	0.2	0.3	0.5	19.2
1983	8.4	1.1	6.1	1.0	0.2	0.3	0.5	17.5
1984	7.8	1.5	6.3	1.0	0.2	0.3	0.4	17.4
1985	8.1	1.5	6.5	0.9	0.2	0.3	0.5	17.9
1986	8.0	1.4	6.5	0.8	0.2	0.3	0.5	17.6
1987	8.5	1.8	6.6	0.7	0.2	0.3	0.4	18.5
1988	8.1	1.9	6.7	0.7	0.2	0.3	0.4	18.3
1989	8.3	1.9	6.7	0.6	0.2	0.3	0.4	18.5
1990	8.2	1.6	6.7	0.6	0.2	0.3	0.5	18.2
1991	8.0	1.7	6.8	0.7	0.2	0.3	0.4	18.0
1992	7.7	1.6	6.7	0.7	0.2	0.3	0.4	17.7
1993	7.9	1.8	6.6	0.7	0.2	0.3	0.3	17.8
1994	7.9	2.1	6.7	0.8	0.2	0.3	0.3	18.4
1995	8.2	2.2	6.7	0.8	0.2	0.3	0.4	18.8
1996	8.8	2.3	6.8	0.7	0.2	0.2	0.3	19.4

SOURCE: Congressional Budget Office.

Table F-8.
Outlays for Major Spending Categories, Fiscal Years 1962-1996 (In billions of dollars)

	Discretionary Spending	Entitlements and Other Mandatory Spending	Net Interest	Offsetting Receipts	Total Outlays
1962	72.1	34.7	6.9	-6.8	106.8
1963	75.3	36.2	7.7	-7.9	111.3
1964	79.1	38.9	8.2	-7.7	118.5
1965	77.8	39.7	8.6	-7.9	118.2
1966	90.1	43.4	9.4	-8.4	134.5
1967	106.4	50.9	10.3	-10.2	157.5
1968	117.9	59.7	11.1	-10.6	178.1
1969	117.3	64.7	12.7	-11.0	183.6
1970	120.2	72.6	14.4	-11.5	195.6
1971	122.5	86.9	14.8	-14.1	210.2
1972	128.4	100.9	15.5	-14.1	230.7
1973	130.2	116.1	17.3	-18.0	245.7
1974	138.1	131.0	21.4	-21.2	269.4
1975	157.8	169.6	23.2	-18.3	332.3
1976	175.3	189.4	26.7	-19.6	371.8
1977	196.8	204.0	29.9	-21.5	409.2
1978	218.5	227.7	35.5	-22.8	458.7
1979	239.7	247.3	42.6	-25.6	504.0
1980	276.1	291.5	52.5	-29.2	590.9
1981	307.8	339.6	68.8	-37.9	678.2
1982	325.8	370.9	85.0	-36.0	745.8
1983	353.1	410.7	89.8	-45.3	808.4
1984	379.2	405.8	111.1	-44.2	851.9
1985	415.7	448.4	129.5	-47.1	946.5
1986	438.4	462.0	136.0	-45.9	990.5
1987	444.0	474.4	138.7	-53.0	1,004.2
1988	464.3	505.3	151.8	-57.0	1,064.5
1989	488.7	549.6	169.3	-63.9	1,143.7
1990	500.4	627.3	184.2	-58.8	1,253.2
1991	533.3	702.6	194.5	-106.0	1,324.4
1992	534.5	716.6	199.4	-68.8	1,381.7
1993	541.0	736.8	198.8	-67.1	1,409.4
1994	543.9	784.0	203.0	-69.1	1,461.7
1995	545.6	818.1	232.2	-80.2	1,515.7
1996	533.2	858.5	240.8	-72.5	1,560.1

SOURCE: Congressional Budget Office.

Table F-9.
Outlays for Major Spending Categories, Fiscal Years 1962-1996 (As a percentage of GDP)

	Discretionary Spending	Entitlements and Other Mandatory Spending	Net Interest	Offsetting Receipts	Total Outlays
1962	12.7	6.1	1.2	-1.2	18.8
1963	12.6	6.0	1.3	-1.3	18.6
1964	12.3	6.1	1.3	-1.2	18.5
1965	11.3	5.8	1.3	-1.1	17.2
1966	11.9	5.7	1.2	-1.1	17.8
1967	13.1	6.3	1.3	-1.3	19.4
1968	13.6	6.9	1.3	-1.2	20.5
1969	12.4	6.8	1.3	-1.2	19.4
1970	11.9	7.2	1.4	-1.1	19.4
1971	11.4	8.1	1.4	-1.3	19.5
1972	10.9	8.6	1.3	-1.2	19.6
1973	9.9	8.9	1.3	-1.4	18.8
1974	9.6	9.1	1.5	-1.5	18.7
1975	10.2	10.9	1.5	-1.2	21.4
1976	10.1	10.9	1.5	-1.1	21.5
1977	10.0	10.3	1.5	-1.1	20.8
1978	9.9	10.3	1.6	-1.0	20.7
1979	9.6	9.9	1.7	-1.0	20.2
1980	10.2	10.7	1.9	-1.1	21.7
1981	10.1	11.1	2.3	-1.2	22.3
1982	10.1	11.5	2.6	-1.1	23.2
1983	10.3	12.0	2.6	-1.3	23.6
1984	9.9	10.6	2.9	-1.2	22.3
1985	10.1	10.9	3.2	-1.1	23.0
1986	10.0	10.6	3.1	-1.1	22.7
1987	9.6	10.3	3.0	-1.1	21.8
1988	9.4	10.2	3.1	-1.1	21.5
1989	9.1	10.3	3.2	-1.2	21.4
1990	8.8	11.0	3.2	-1.0	22.1
1991	9.1	12.0	3.3	-1.8	22.6
1992	8.7	11.7	3.2	-1.1	22.5
1993	8.4	11.4	3.1	-1.0	21.8
1994	8.0	11.5	3.0	-1.0	21.4
1995	7.6	11.4	3.2	-1.1	21.1
1996	7.1	11.5	3.2	-1.0	20.8

SOURCE: Congressional Budget Office.

Table F-10.
Discretionary Outlays, Fiscal Years 1962-1996 (In billions of dollars)

	Defense	International	Domestic	Total
1962	52.6	5.5	14.0	72.1
1963	53.7	5.2	16.3	75.3
1964	55.0	4.6	19.5	79.1
1965	51.0	4.7	22.1	77.8
1966	59.0	5.1	26.1	90.1
1967	72.0	5.3	29.1	106.4
1968	82.2	4.9	30.9	117.9
1969	82.7	4.1	30.5	117.3
1970	81.9	4.0	34.3	120.2
1971	79.0	3.8	39.7	122.5
1972	79.3	4.6	44.5	128.4
1973	77.1	4.8	48.3	130.2
1974	80.7	6.2	51.1	138.1
1975	87.6	8.2	62.0	157.8
1976	89.9	7.5	77.9	175.3
1977	97.5	8.0	91.3	196.8
1978	104.6	8.5	105.3	218.5
1979	116.8	9.1	113.8	239.7
1980	134.6	12.8	128.7	276.1
1981	158.0	13.6	136.1	307.8
1982	185.9	12.9	127.0	325.8
1983	209.9	13.6	129.7	353.1
1984	228.0	16.3	134.9	379.2
1985	253.1	17.4	145.2	415.7
1986	273.8	17.7	146.8	438.4
1987	282.5	15.2	146.3	444.0
1988	290.9	15.7	157.7	464.3
1989	304.0	16.6	168.1	488.7
1990	300.1	19.1	181.2	500.4
1991	319.7	19.7	193.9	533.3
1992	302.6	19.2	212.7	534.5
1993	292.4	21.6	226.9	541.0
1994	282.3	20.8	240.8	543.9
1995	273.6	20.1	252.0	545.6
1996	266.5	18.6	248.1	533.2

SOURCE: Congressional Budget Office.

Table F-11.
Discretionary Outlays, Fiscal Years 1962-1996 (As a percentage of GDP)

	Defense	International	Domestic	Total
1962	9.3	1.0	2.5	12.7
1963	9.0	0.9	2.7	12.6
1964	8.6	0.7	3.0	12.3
1965	7.4	0.7	3.2	11.3
1966	7.8	0.7	3.4	11.9
1967	8.9	0.7	3.6	13.1
1968	9.4	0.6	3.6	13.6
1969	8.7	0.4	3.2	12.4
1970	8.1	0.4	3.4	11.9
1971	7.3	0.3	3.7	11.4
1972	6.7	0.4	3.8	10.9
1973	5.9	0.4	3.7	9.9
1974	5.6	0.4	3.6	9.6
1975	5.6	0.5	4.0	10.2
1976	5.2	0.4	4.5	10.1
1977	4.9	0.4	4.6	10.0
1978	4.7	0.4	4.8	9.9
1979	4.7	0.4	4.6	9.6
1980	5.0	0.5	4.7	10.2
1981	5.2	0.4	4.5	10.1
1982	5.8	0.4	4.0	10.1
1983	6.1	0.4	3.8	10.3
1984	6.0	0.4	3.5	9.9
1985	6.2	0.4	3.5	10.1
1986	6.3	0.4	3.4	10.0
1987	6.1	0.3	3.2	9.6
1988	5.9	0.3	3.2	9.4
1989	5.7	0.3	3.1	9.1
1990	5.3	0.3	3.2	8.8
1991	5.5	0.3	3.3	9.1
1992	4.9	0.3	3.5	8.7
1993	4.5	0.3	3.5	8.4
1994	4.1	0.3	3.5	8.0
1995	3.8	0.3	3.5	7.6
1996	3.6	0.2	3.3	7.1

SOURCE: Congressional Budget Office.

Table F-12.
Outlays for Entitlements and Other Mandatory Spending,
Fiscal Years 1962-1996 (In billions of dollars)

	Means-Tested Programs			Non-Means-Tested Programs							Total Non-Means-Tested Programs	Total Entitlements and Other Mandatory Spending
	Medicaid	Other	Total Means-Tested	Social Security	Medicare	Other Retirement and Disability	Unemployment Compensation	Farm Price Supports	Deposit Insurance	Other		
1962	0.1	4.2	4.3	14.0	0	2.7	3.5	2.4	-0.4	8.2	30.4	34.7
1963	0.2	4.5	4.7	15.5	0	2.9	3.6	3.4	-0.4	6.6	31.5	36.2
1964	0.2	4.8	5.0	16.2	0	3.3	3.4	3.4	-0.4	8.0	33.9	38.9
1965	0.3	4.9	5.2	17.1	0	3.6	2.7	2.8	-0.4	8.7	34.5	39.7
1966	0.8	5.0	5.8	20.3	a	4.1	2.2	1.4	-0.5	10.1	37.6	43.4
1967	1.2	5.0	6.2	21.3	3.2	4.8	2.3	2.0	-0.4	11.6	44.7	50.9
1968	1.8	5.7	7.5	23.3	5.1	5.7	2.2	3.3	-0.5	13.2	52.2	59.7
1969	2.3	6.3	8.6	26.7	6.3	5.2	2.3	4.2	-0.6	11.9	56.1	64.7
1970	2.7	7.4	10.1	29.6	6.8	6.6	3.1	3.8	-0.5	13.0	62.5	72.6
1971	3.4	10.0	13.4	35.1	7.5	8.3	5.8	2.9	-0.4	14.4	73.5	86.9
1972	4.6	11.7	16.3	39.4	8.4	9.6	6.7	4.1	-0.6	17.1	84.6	100.9
1973	4.6	11.4	16.0	48.2	9.0	11.7	4.9	3.6	-0.8	23.5	100.1	116.1
1974	5.8	13.7	19.5	55.0	10.7	13.8	5.6	1.0	-0.6	26.1	111.5	131.0
1975	6.8	18.6	25.4	63.6	14.1	18.3	12.8	0.6	0.5	34.3	144.2	169.6
1976	8.6	21.7	30.3	72.7	16.9	18.9	18.6	1.1	-0.6	31.5	159.1	189.4
1977	9.9	23.4	33.3	83.7	20.8	21.6	14.3	3.8	-2.8	29.3	170.7	204.0
1978	10.7	24.8	35.5	92.4	24.3	23.7	10.8	5.7	-1.0	36.2	192.2	227.7
1979	12.4	26.5	38.9	102.6	28.2	27.9	9.8	3.6	-1.7	38.1	208.4	247.3
1980	14.0	31.9	45.9	117.1	34.0	32.1	16.9	2.8	-0.4	43.2	245.6	291.5
1981	16.8	37.1	53.9	137.9	41.3	37.4	18.3	4.0	-1.4	48.2	285.7	339.6
1982	17.4	37.4	54.8	153.9	49.2	40.7	22.2	11.7	-2.1	40.5	316.1	370.9
1983	19.0	40.3	59.3	168.5	55.5	43.2	29.7	18.9	-1.2	36.8	351.5	410.7
1984	20.1	41.2	61.3	176.1	61.0	44.7	17.0	7.3	-0.8	39.3	344.4	405.8
1985	22.7	43.3	66.0	186.4	69.6	45.5	15.8	17.7	-2.2	49.4	382.4	448.4
1986	25.0	44.9	66.9	196.5	74.2	47.5	16.1	25.8	1.5	30.3	392.1	462.0
1987	27.4	45.5	72.9	205.1	79.9	50.8	15.5	22.4	3.1	24.8	401.5	474.4
1988	30.5	50.0	80.5	216.8	85.7	54.2	13.6	12.2	10.0	32.3	424.8	505.3
1989	34.6	54.2	88.8	230.4	94.3	57.2	13.9	10.6	22.0	32.4	460.8	549.6
1990	41.1	58.8	99.9	246.5	107.4	59.9	17.5	6.5	57.9	31.7	527.4	627.3
1991	52.5	69.7	122.2	266.8	114.2	64.4	25.1	10.1	66.2	33.6	580.4	702.6
1992	67.8	78.7	146.5	285.2	129.4	66.6	36.9	9.3	2.6	40.2	570.1	716.6
1993	75.8	86.5	162.3	302.0	143.1	68.7	35.4	15.6	-28.0	37.7	574.5	736.8
1994	82.0	95.0	177.0	316.9	159.5	72.1	26.4	9.9	-7.6	29.8	607.0	784.0
1995	89.1	101.5	190.6	333.3	177.1	75.2	21.3	5.8	-17.9	32.8	627.6	818.1
1996	92.0	104.2	196.2	347.1	191.3	77.3	22.4	5.0	-8.4	27.6	662.3	858.5

SOURCE: Congressional Budget Office.

a. Less than \$50 million.

Table F-13.
Outlays for Entitlements and Other Mandatory Spending,
Fiscal Years 1962-1996 (As a percentage of GDP)

	Means-Tested Programs			Non-Means-Tested Programs							Total Non-Means-Tested Programs	Total Entitlements and Other Mandatory Spending
	Medicaid	Other	Total Means-Tested	Social Security	Medicare	Other Retirement and Disability	Unemployment Compensation	Farm Price Supports	Deposit Insurance	Other		
1962	a	0.7	0.8	2.5	0	0.5	0.6	0.4	-0.1	1.4	5.4	6.1
1963	a	0.8	0.8	2.6	0	0.5	0.6	0.6	-0.1	1.1	5.3	6.0
1964	a	0.7	0.8	2.5	0	0.5	0.5	0.5	-0.1	1.2	5.3	6.1
1965	a	0.7	0.8	2.5	0	0.5	0.4	0.4	-0.1	1.3	5.0	5.8
1966	0.1	0.7	0.8	2.7	a	0.5	0.3	0.2	-0.1	1.3	5.0	5.7
1967	0.1	0.6	0.8	2.6	0.4	0.6	0.3	0.2	a	1.4	5.5	6.3
1968	0.2	0.7	0.9	2.7	0.6	0.7	0.2	0.4	-0.1	1.5	6.0	6.9
1969	0.2	0.7	0.9	2.8	0.7	0.6	0.2	0.4	-0.1	1.3	5.9	6.8
1970	0.3	0.7	1.0	2.9	0.7	0.7	0.3	0.4	a	1.3	6.2	7.2
1971	0.3	0.9	1.2	3.3	0.7	0.8	0.5	0.3	a	1.3	6.8	8.1
1972	0.4	1.0	1.4	3.3	0.7	0.8	0.6	0.3	-0.1	1.5	7.2	8.6
1973	0.4	0.9	1.2	3.7	0.7	0.9	0.4	0.3	-0.1	1.8	7.6	8.9
1974	0.4	1.0	1.4	3.8	0.7	1.0	0.4	0.1	a	1.8	7.8	9.1
1975	0.4	1.2	1.6	4.1	0.9	1.2	0.8	0.0	a	2.2	9.3	10.9
1976	0.5	1.3	1.7	4.2	1.0	1.1	1.1	0.1	a	1.8	9.2	10.9
1977	0.5	1.2	1.7	4.2	1.1	1.1	0.7	0.2	-0.1	1.5	8.7	10.3
1978	0.5	1.1	1.6	4.2	1.1	1.1	0.5	0.3	a	1.6	8.7	10.3
1979	0.5	1.1	1.6	4.1	1.1	1.1	0.4	0.1	-0.1	1.5	8.3	9.9
1980	0.5	1.2	1.7	4.3	1.2	1.2	0.6	0.1	a	1.6	9.0	10.7
1981	0.6	1.2	1.8	4.5	1.4	1.2	0.6	0.1	a	1.6	9.4	11.1
1982	0.5	1.2	1.7	4.8	1.5	1.3	0.7	0.4	-0.1	1.3	9.8	11.5
1983	0.6	1.2	1.7	4.9	1.6	1.3	0.9	0.6	a	1.1	10.3	12.0
1984	0.5	1.1	1.6	4.6	1.6	1.2	0.4	0.2	a	1.0	9.0	10.6
1985	0.6	1.1	1.6	4.5	1.7	1.1	0.4	0.4	-0.1	1.2	9.3	10.9
1986	0.6	1.0	1.6	4.5	1.7	1.1	0.4	0.6	a	0.7	9.0	10.6
1987	0.6	1.0	1.6	4.4	1.7	1.1	0.3	0.5	0.1	0.5	8.7	10.3
1988	0.6	1.0	1.6	4.4	1.7	1.1	0.3	0.2	0.2	0.7	8.6	10.2
1989	0.6	1.0	1.7	4.3	1.8	1.1	0.3	0.2	0.4	0.6	8.6	10.3
1990	0.7	1.0	1.8	4.3	1.9	1.1	0.3	0.1	1.0	0.6	9.3	11.0
1991	0.9	1.2	2.1	4.6	1.9	1.1	0.4	0.2	1.1	0.6	9.9	12.0
1992	1.1	1.3	2.4	4.6	2.1	1.1	0.6	0.2	a	0.7	9.3	11.7
1993	1.2	1.3	2.5	4.7	2.2	1.1	0.5	0.2	-0.4	0.6	8.9	11.4
1994	1.2	1.4	2.6	4.6	2.3	1.1	0.4	0.1	-0.1	0.4	8.9	11.5
1995	1.2	1.4	2.7	4.6	2.5	1.0	0.3	0.1	-0.2	0.5	8.7	11.4
1996	1.2	1.4	2.6	4.6	2.6	1.0	0.3	0.1	-0.1	0.4	8.8	11.5

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

Medicare Projections

Growth in Medicare spending slowed from about 10 percent a year on average between 1990 and 1995 to 8 percent in 1996. Assuming that the Congress makes no changes in Medicare laws, the Congressional Budget Office (CBO) projects that mandatory spending for Medicare, primarily for medical benefits, will increase from \$191 billion in 1996 to \$314 billion in 2002, an average annual increase of 8.6 percent (see Table G-1). Spending will reach \$464 billion by 2007, an average annual increase of 8.4 percent over the 1996-2007 period.

Although the growth in Medicare spending has slowed since the late 1980s and early 1990s, CBO projects that it will continue to outpace the growth in resources that finance the program. Because premiums for the Supplementary Medical Insurance (SMI) program after 1998 will increase only at the rate of the Social Security cost-of-living adjustment under current law, SMI spending net of premiums will increase even more rapidly than the growth in benefits. By 2002, SMI premiums will decline to 21 percent of SMI spending, down from the current statutory rate of 25 percent. CBO assumes that outlays for Hospital Insurance (HI) will continue to increase more rapidly than payroll tax revenues, depleting the HI trust fund by 2001 (see Figure G-1).

The growth in Medicare spending reflects projected increases both in enrollment and in spending per enrollee. Growth in enrollment, however, accounts for only a small share of the increase, rising at an average annual rate of 1.2 percent between 1996 and 2002. Most of the increase in spending is attributable to growth in spending per enrollee, which in turn reflects automatic increases in prices paid per unit of service

and increases in the number and complexity of services provided per enrollee (see Figure G-2).

Although overall Medicare enrollment is projected to grow only modestly, the distribution of beneficiaries between the traditional fee-for-service sector and health maintenance organizations (HMOs) is changing significantly. (In this discussion, the term HMO refers not only to risk-based plans but also other HMOs, certain demonstrations, and health care prepayment plans, which are paid on a cost basis for Part B services.) Enrollment in HMOs has risen very rapidly in recent years, reaching almost 10 percent of beneficiaries in 1996. Enrollment in Medicare HMOs will continue to grow rapidly, approaching 25 percent of the Medicare market by 2002 (see Figure G-3). That projection reflects two assumptions: that an increasing proportion of people becoming eligible for Medicare upon turning 65 will already be HMO members, making Medicare's HMO sector more familiar; and that HMO enrollment will become relatively more attractive as premiums for Medigap coverage in the fee-for-service sector continue to rise. CBO's projections of Medicare's payments to fee-for-service providers assume that the absolute number of enrollees in the fee-for-service sector continues to decline; that fees for hospital, physician, and other fee-for-service benefits are raised relatively slowly (based on formulas in current law); and that the volume of services provided grows at a fairly robust pace.

Payments to HMOs

A direct result of the rapid increase in HMO enrollment is that payments to managed care plans are the fastest-

growing element of Medicare spending. CBO projects that such payments will increase from \$18 billion in 1996 to \$73 billion in 2002, a 26 percent average annual rate of growth. When expressed as payments per enrollee, however, HMO spending rises at about the same rate as fee-for-service spending (see Table G-2).

Under current law, the growth in Medicare payments to risk-based HMOs is linked directly to fee-for-service spending, because payments to HMOs are set to equal 95 percent of Medicare's expected cost for similar beneficiaries in the fee-for-service sector. Per-enrollee spending for cost-based HMOs and for health care prepayment plans, however, is not directly tied to fee-for-service spending and has grown faster than fee-for-service spending per enrollee in recent years. For that reason, and because of quirks in the timing of HMO payments, the growth in total HMO payments per enrollee is not always identical to the growth in fee-for-service spending per enrollee. Medicare accelerates payments to HMOs if the first of the month falls on a weekend or holiday. Thus, risk-based HMOs received 11 payments in fiscal year 1996. As a result, the average annual

growth rate of HMO payments from 1996 to 2002 is slightly elevated because of the low base in 1996. Similarly, 11 payments will be made in 2007. The calendar effect therefore reduces slightly the average annual growth rate in per-enrollee HMO payments between 2002 and 2007. (Payments will also be accelerated from 2001 to 2000, affecting calculations of growth rates involving those years too.)

Payments to Fee-for-Service Providers

Despite the shrinkage in fee-for-service enrollment, CBO expects that spending in that sector will continue to grow rapidly because Medicare's current reimbursement rules give neither beneficiaries nor providers much incentive to control costs. The vast majority of beneficiaries have supplementary coverage that covers deductibles, coinsurance, or both. On the provider side, efforts to contain costs have generally focused on re-

Table G-1.
Medicare Mandatory Outlays (By selected fiscal year)

	Outlays (Billions of dollars)				Average Annual Rate of Growth (Percent)		
	1990	1996	2002	2007	1990-1996	1996-2002	1996-2007
Gross Mandatory Outlays							
Benefits	107	191	312	463	10.1	8.5	8.4
Mandatory administration	<u>a</u>	<u>a</u>	<u>1</u>	<u>1</u>	4.3	29.1	15.7
Total	107	191	314	464	10.1	8.6	8.4
Premiums	-12	-20	-26	-32	9.5	4.2	4.4
Net Medicare Outlays	96	171	288	432	10.2	9.1	8.8

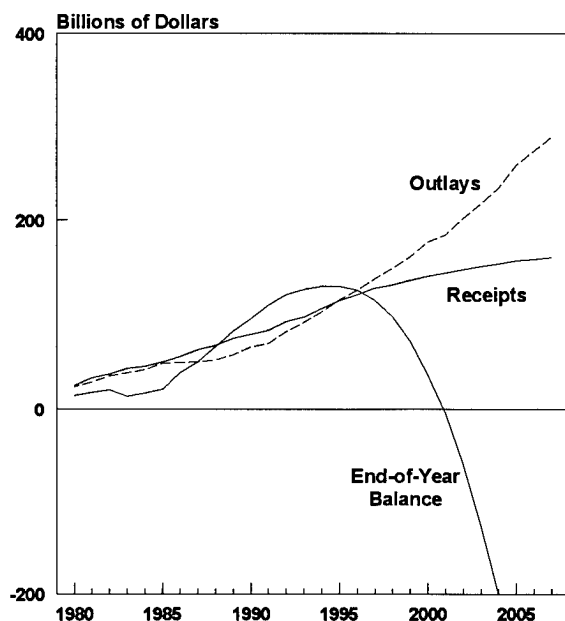
SOURCE: Congressional Budget Office.

NOTES: Mandatory outlays for administration support peer review organizations and certain activities against fraud and abuse.

As a point of reference, the monthly premium for Supplementary Medical Insurance, Part B of Medicare, for calendar year 1996 was \$42.50. Premiums in 1996 covered approximately 27 percent of program costs. The comparable figures for 2002 and 2007 are monthly premiums of \$51.50 and \$59.70, with premiums covering 21 percent and 16 percent of program costs.

a. Less than \$500 million.

Figure G-1.
Receipts, Outlays, and End-of-Year Balance
of Medicare's Hospital Insurance Trust Fund
(By fiscal year)



SOURCE: Congressional Budget Office.

stricting growth in the price per unit of service—by limiting the automatic fee increases or the growth in costs eligible for reimbursement—but with few or no limitations on the number of units of service provided. Moreover, although efforts to control the growth of both prices and volume of services furnished by a type of provider have had some success in slowing the growth in payments to those providers, they have also created incentives to channel patients into alternative settings that have no restrictions. In CBO's projections of spending for different types of services, those with no form of volume control (home health services, for example) grow much faster than those with some control on volume, such as the prospective payment system (PPS) that pays for hospital inpatient services (see Table G-3).

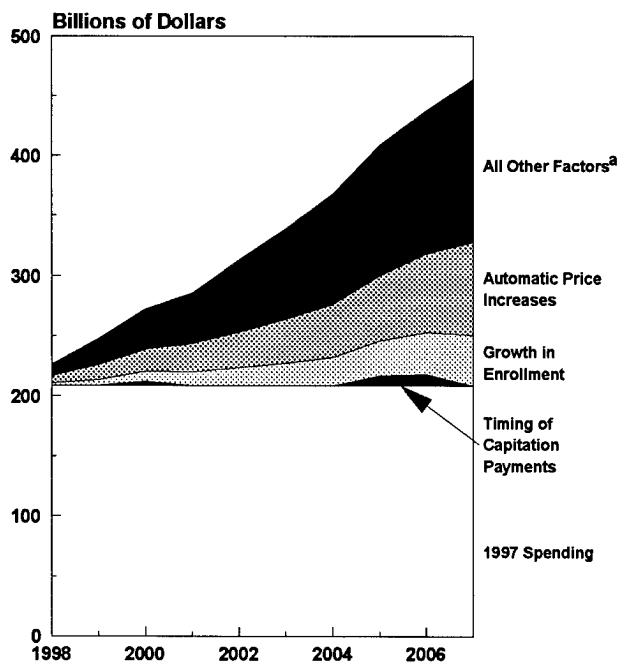
HI Benefits

Under CBO's current-policy assumptions, payments to hospitals for inpatient services will increase from \$84

billion in 1996 to \$105 billion in 2002, a 3.7 percent average annual rate of growth. Hospitals that are reimbursed under PPS account for most of those payments, but their share will decline because of the rapid growth in payments to PPS-exempt hospitals. Even with fee-for-service enrollment projected to fall through 2007, projected increases in the number of admissions per beneficiary and in payments per admission result in a 5.3 percent average annual increase in hospital spending per fee-for-service enrollee.

Medicare payments to providers of postacute care, especially skilled nursing facilities (SNFs) and home health services, will continue to rise rapidly. SNF spending is projected to increase from \$11 billion in 1996 to \$19 billion in 2002, a 9.5 percent average annual increase (11.2 percent per fee-for-service enrollee). Home health spending is projected to increase from \$17 billion in 1996 to \$30 billion in 2002, a 10.2 percent average annual increase (11.9 percent per fee-for-service enrollee). The very fast growth in spending for

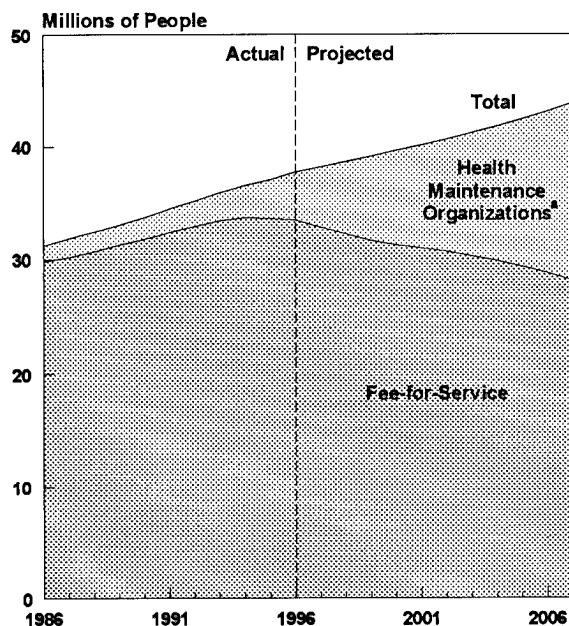
Figure G-2.
Cumulative Contributions to Growth in Medicare
Spending (By fiscal year)



SOURCE: Congressional Budget Office.

a. Includes increases in the number and complexity of services provided per enrollee.

Figure G-3.
Medicare Enrollment (By calendar year)



SOURCE: Congressional Budget Office.

a. Includes risk-based plans, other HMOs, certain demonstrations, and health care prepayment plans.

those services over the past decade has been fueled by a reimbursement methodology that gives providers incentives to maximize volume and intensity (the number and complexity of services provided) and by significant expansions of postacute benefits resulting from court decisions, legislative actions, and regulation. CBO projects that because of the greater intensity of services, costs per day in a skilled nursing facility will grow at twice the rate of increase in the total number of days. About two-thirds of the increase in spending on home health services reflects projected increases in the number of visits, with the remainder stemming from projected increases in costs per visit.

SMI Benefits

Under CBO's baseline projections, payments made for physicians' services will rise from \$31 billion in 1996 to \$35 billion in 2002, a 2.4 percent average annual increase. Growth in spending per fee-for-service enrollee will average 3.9 percent a year between 1996 and

and 2002, down by about 1 percentage point a year from the May 1996 baseline.

Table G-2.
Mandatory Outlays for Medicare Benefits, by Sector (By selected fiscal year)

	1990	1996	2002	2007
In Billions of Dollars				
Fee-for-Service	102	173	239	310
Health Maintenance Organizations	5	18	73	153
Total	107	191	312	463

Average Annual Growth Rate from Previous Year Shown (Percent)

Fee-for-Service	9.2	5.6	5.3
Health Maintenance Organizations	23.9	26.4	16.0
All Outlays for Benefits	10.1	8.5	8.2

Average Annual Growth of Outlays per Enrollee from Previous Year Shown (Percent)

Fee-for-Service	7.8	7.2	7.1
Health Maintenance Organizations	8.9	9.5	6.0
All Outlays for Benefits	7.9	7.2	6.6

Memorandum:

Average Annual Growth
in Medicare Enrollment
from Previous Year Shown
(Percent)

Fee-for-service	1.3	-1.5	-1.7
Health maintenance organizations	13.7	15.5	9.4
All Medicare enrollees	2.0	1.2	1.5

SOURCE: Congressional Budget Office.

NOTE: Medicare outlays for health maintenance organizations include spending for risk-based plans, other HMOs, certain demonstrations, and health care prepayment plans.

Table G-3.
Outlays for Fee-for-Service Medicare Benefits, by Type of Service (By selected fiscal year)

	1996	2002	2007
In Billions of Dollars			
Hospital Insurance			
Hospital	84	105	125
Home health	17	30	43
Skilled nursing facility	11	19	27
Hospice	<u>2</u>	<u>3</u>	<u>4</u>
Subtotal	114	156	198
Supplementary Medical Insurance			
Physician	31	35	39
Hospital outpatient and other services	17	27	38
Laboratory services, durable medical equipment, and other services	<u>12</u>	<u>21</u>	<u>34</u>
Subtotal	59	83	111
Total	173	239	310
Average Annual Growth Rate from Previous Year Shown (Percent)			
Hospital Insurance			
Hospital		3.7	3.6
Home health		10.2	7.8
Skilled nursing facility		9.5	6.8
Hospice		5.9	5.5
All Hospital Insurance		5.4	4.9
Supplementary Medical Insurance			
Physician		2.4	2.2
Hospital outpatient and other services		8.3	7.3
Laboratory services, durable medical equipment, and other services		9.7	9.8
All Supplementary Medical Insurance		5.8	6.0
All Fee-for-Service Benefits		5.6	5.3
Average Annual Growth of Outlays per Enrollee from Previous Year Shown (Percent)			
Hospital Insurance			
Hospital		5.3	5.4
Home health		11.9	9.6
Skilled nursing facility		11.2	8.6
Hospice		7.5	7.3
All hospital insurance		7.1	6.7
Supplementary Medical Insurance			
Physician		3.9	4.0
Hospital outpatient and other services		10.0	9.1
Laboratory services, durable medical equipment, and other services		11.4	11.7
All Supplementary Medical Insurance		7.4	7.8
All Fee-for-Service Benefits		7.2	7.1
Memorandum:			
Average Annual Growth of Fee-for-Service Enrollment from Previous Year Shown (Percent)		-1.5	-1.7

SOURCE: Congressional Budget Office.

Projected increases in physicians' fees are based on how spending on physicians' services compares with certain targets, the volume performance standards. In general, the slower the growth in volume of services, the faster the increase in fees. In line with recent trends, CBO has reduced the projected annual growth in the volume of physicians' services per enrollee to about 4.5 percent, compared with 6.5 percent assumed in the May 1996 baseline. As a result, CBO has increased the assumed updates to the physician fee schedule by about 1 percentage point a year, from -1.4 percent a year to -0.3 percent a year on average in the projection period.

Spending on hospital outpatient services—including laboratory services—will increase from \$17 billion in 1996 to \$27 billion in 2002, an 8.3 percent average

annual increase (10.0 percent per fee-for-service enrollee). Reimbursement for outpatient services has increased at double-digit rates in recent years, and CBO projects that those increases will moderate only slightly.

Payments for other SMI benefits—including physicians' in-office and independent laboratory services, durable medical equipment, and pharmaceuticals—will increase from \$12 billion in 1997 to \$21 billion in 2002, a 9.7 percent average annual increase (11.4 percent per fee-for-service enrollee). Legislative and regulatory actions have slowed spending for laboratory services from the rapid growth experienced in the early 1990s. Spending for drugs, although a small component of SMI spending, is increasing at a double-digit rate.

CBO Projections of National Health Expenditures Through 2007

The Congressional Budget Office (CBO) estimates that national health spending grew by about 4 percent in calendar year 1996, the slowest rate of growth in over 30 years (see Table H-1). CBO estimates that private health spending rose about 3 percent in 1996, the same pace as in 1995 and up slightly from the 2 percent rate achieved in 1994. Federal spending for Medicaid (the joint federal/state health program for the poor) grew by about 4 percent in 1996, the slowest rate since 1982; spending for Medicare (the large federal health insurance plan for the aged and disabled) grew by 8.5 percent (see Table H-2).¹

Because health spending grew at about the same pace as nominal gross domestic product (GDP) in 1994 and 1995, the health sector remained a constant share of the U.S. economy.² CBO projects that health spending will resume growing faster than the rest of the economy, rising gradually from about 13.6 percent of GDP in 1996 to about 16 percent in 2007 (see Figure H-1 on page 128).

National health spending affects the federal budget in two ways. Government health programs like Medicare and Medicaid are included in federal outlays.

1. In the context of national health expenditures, spending by federal health programs is displayed by calendar year as incurred obligations, and slightly different definitions than those in the federal budget are used. For example, federal outlays for Medicaid grew by 3.3 percent in fiscal year 1996.
2. The appropriate benchmark for comparisons between health spending and the economy is nominal GDP. Growth in nominal GDP includes both price change and growth in real output.

Also, because employers' contributions toward private health insurance are not taxed as income, the share of employee compensation delivered as health benefits affects federal revenues.

CBO's health projections represent an internally consistent scenario for the possible future course of health spending, assuming that federal laws and key federal regulations do not change over the projection period.³ A projection of current policy, however, may be far from the best forecast. Federal and state governments may take new actions to change the health spending of government programs, and new legislation affecting the private health insurance system is also possible. Moreover, other plausible scenarios are possible under current law. The pace of change in the health economy is extremely rapid, and all health projections are subject to a great amount of uncertainty.

Changes in Health Care Purchasing

Before the 1990s, the market for private health insurance was fairly stable, and price competition among health plans was relatively weak. U.S. consumers pur-

3. Of course, some future changes to federal government programs—Medicaid expansions, for example—are scheduled in current law. CBO factors in the likely impact of those changes and of likely changes in state laws that would affect health spending.

chased health care indirectly and, for the most part, passively. Fee-for-service insurance plans generally paid the bills submitted by consumers' health providers and passed the costs along first to employers and ultimately back to consumers. Managed care plans were expanding but had yet to have a major impact on the market.

Consumers still purchase health care indirectly, but recently they have become more active in making their

purchases, and price competition among health plans has flourished. Managed care plans, now dominant in the health insurance market, must respond to the demands from workers and their employers for low costs as well as to the demands from consumers and health providers for high-quality care.

CBO described some of the reasons for such a rapid change in the environment for health purchases in

Table H-1.
National Health Expenditures for Selected Calendar Years, by Source of Funds

Source of Funds	Actual						Projected			
	1965	1980	1990	1993	1994	1995	1996	1997	2000	2007
In Billions of Dollars										
Private	31	142	413	506	517	532	549	571	661	972
Public										
Federal	5	72	196	278	302	328	349	375	469	799
State and local	<u>5</u>	<u>33</u>	<u>89</u>	<u>109</u>	<u>118</u>	<u>128</u>	<u>133</u>	<u>141</u>	<u>167</u>	<u>256</u>
Total	41	247	697	892	937	988	1,032	1,087	1,297	2,026
As a Percentage of Total Expenditures										
Private	75.0	57.6	59.2	56.7	55.2	53.8	53.2	52.5	51.0	47.9
Public										
Federal	11.7	29.1	28.1	31.1	32.2	33.2	33.9	34.5	36.2	39.4
State and local	<u>13.3</u>	<u>13.3</u>	<u>12.7</u>	<u>12.2</u>	<u>12.6</u>	<u>12.9</u>	<u>12.9</u>	<u>12.9</u>	<u>12.9</u>	<u>12.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average Annual Growth from Previous Year Shown (Percent)										
Private	n.a.	10.7	11.2	7.0	2.3	2.9	3.2	3.9	5.0	5.7
Public										
Federal	n.a.	19.7	10.5	12.3	8.7	8.8	6.4	7.5	7.7	7.9
State and local	n.a.	12.7	10.4	7.1	8.4	8.4	4.1	5.5	5.9	6.3
All National Health Expenditures		12.7	10.9	8.5	5.1	5.5	4.4	5.3	6.1	6.6
Memorandum:										
Gross Domestic Product (Billions of dollars)	719	2,784	5,744	6,553	6,936	7,254	7,570	7,916	9,097	12,518
Average Annual Growth of GDP (Percentage change from previous year shown)	n.a.	9.4	7.5	4.5	5.8	4.6	4.4	4.6	4.7	4.7
Ratio of National Health Expenditures to GDP (Percent)	5.7	8.9	12.1	13.6	13.5	13.6	13.6	13.7	14.3	16.2

SOURCE: Congressional Budget Office.

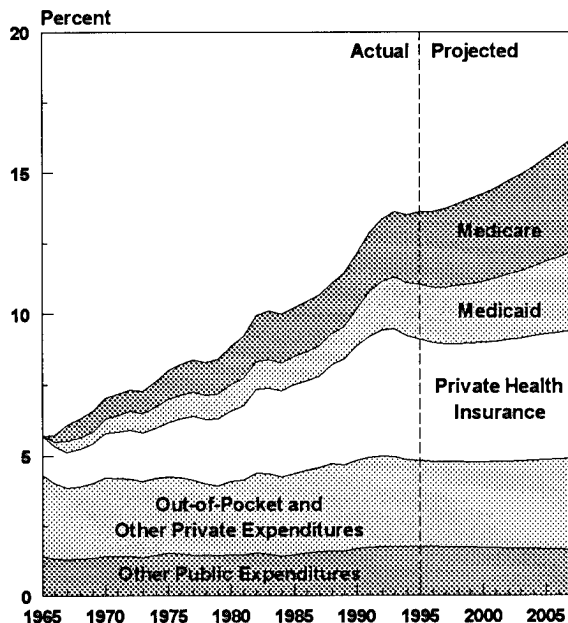
NOTE: n.a. = not applicable.

Table H-2.**Projections of National Health Expenditures Through 2007, by Source of Funds (By calendar year)**

Source of Funds	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In Billions of Dollars												
Private												
Private health insurance	319	330	346	364	384	405	428	453	479	506	535	565
Out of pocket	191	199	208	218	230	243	257	272	288	305	323	342
Other	<u>40</u>	<u>42</u>	<u>43</u>	<u>45</u>	<u>47</u>	<u>49</u>	<u>52</u>	<u>54</u>	<u>57</u>	<u>59</u>	<u>62</u>	<u>65</u>
Subtotal	549	571	597	628	661	697	737	779	823	870	919	972
Federal												
Medicare	203	220	240	261	283	305	330	357	387	421	459	501
Medicaid	90	97	104	112	121	131	142	154	166	181	196	213
Other	<u>56</u>	<u>58</u>	<u>60</u>	<u>63</u>	<u>65</u>	<u>68</u>	<u>70</u>	<u>73</u>	<u>76</u>	<u>79</u>	<u>82</u>	<u>85</u>
Subtotal	349	375	404	436	469	504	542	584	630	681	737	799
State and Local												
Medicaid	57	61	65	70	76	82	89	96	104	113	123	133
Other	<u>77</u>	<u>80</u>	<u>84</u>	<u>87</u>	<u>91</u>	<u>95</u>	<u>100</u>	<u>104</u>	<u>108</u>	<u>113</u>	<u>118</u>	<u>122</u>
Subtotal	133	141	148	157	167	177	188	200	212	226	240	256
All National Health Expenditures	1,032	1,087	1,150	1,221	1,297	1,378	1,467	1,563	1,665	1,777	1,897	2,026
Annual Percentage Change												
Private												
Private health insurance	2.6	3.6	4.8	5.3	5.4	5.5	5.8	5.7	5.7	5.7	5.7	5.7
Out of pocket	4.4	4.6	4.6	4.9	5.4	5.5	5.8	5.7	5.9	5.9	5.9	5.9
Other	3.1	3.7	4.0	4.5	4.5	4.4	4.7	4.6	4.6	4.5	4.5	4.5
All private	3.2	3.9	4.7	5.1	5.3	5.5	5.7	5.7	5.7	5.7	5.7	5.7
Federal												
Medicare	8.5	8.7	8.7	9.0	8.2	8.0	8.1	8.2	8.5	8.8	9.0	9.1
Medicaid	4.3	7.1	7.1	8.0	8.1	8.1	8.3	8.4	8.3	8.6	8.7	8.7
Other	2.6	3.7	3.8	4.0	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.8
All federal	6.4	7.5	7.5	8.0	7.6	7.4	7.6	7.7	7.9	8.1	8.3	8.4
State and Local												
Medicaid	4.3	7.1	7.1	8.0	8.1	8.1	8.3	8.4	8.3	8.6	8.7	8.7
Other	4.0	4.3	4.4	4.6	4.6	4.4	4.5	4.3	4.2	4.2	4.1	4.0
All state and local	4.1	5.5	5.6	6.1	6.1	6.1	6.3	6.2	6.2	6.3	6.4	6.4
All National Health Expenditures	4.4	5.3	5.8	6.2	6.2	6.3	6.5	6.5	6.6	6.7	6.8	6.8

SOURCE: Congressional Budget Office.

Figure H-1.
Components of National Health Spending
as a Share of GDP (By calendar year)



SOURCE: Congressional Budget Office.

The Economic and Budget Outlook: An Update (August 1995). At that time, CBO argued that managed care plans and the competition they have spawned are helping to offset (rather than eliminate) some of the root problems that have historically weakened price competition in the health sector.

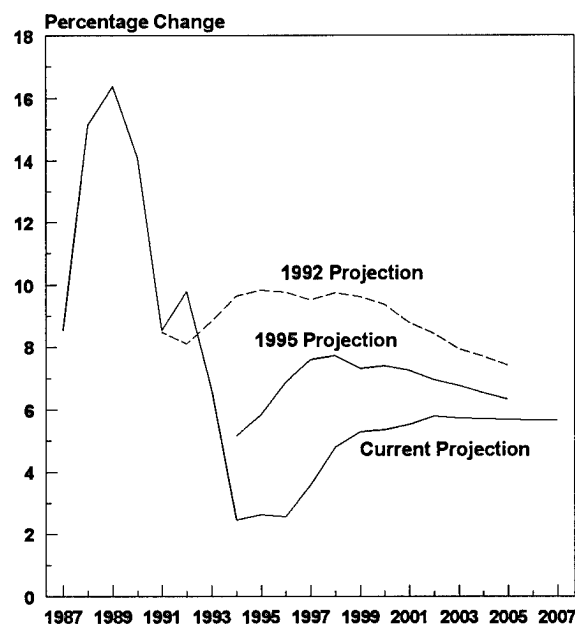
Changes in CBO's Projections

In 1992, CBO introduced its projections of national health spending using historical data published through 1990 by the Health Care Financing Administration (HCFA).⁴ In 1995, CBO undertook a major revision of the projections of health spending and its components—most notably, Medicare, Medicaid, and private health insurance spending. CBO's current projections reflect further reductions in projected Medicaid spending (discussed in Chapter 2 of this report), Medicare outlays (discussed in Chapter 2 and Appendix G), and

private health insurance spending. Table H-3 shows CBO's current and past projections of the growth in spending for the major components of national health expenditures and of the amount by which that growth in spending exceeded the growth of GDP. The latter concept controls for any changes in the outlook for overall economic growth that may have occurred over the years, and is thus a more direct illustration of CBO's assumptions about health trends.

CBO's 1992 projection of private insurance premiums averaged about 9 percent a year between 1991 and 2000 (see Figure H-2). That rate was down considerably from those seen in the late 1980s, but it was in line with historical patterns of rapid growth in spending relative to the economy as a whole. Between 1965 and 1995, private health insurance premiums grew about 4.2 percentage points a year more rapidly than GDP (see Figure H-3 on page 130). Reflecting a continuation of past trends, CBO's projections from 1992 assumed that premiums would grow about 3.5 percentage

Figure H-2.
Growth in Private Health Insurance Premiums
(By calendar year)



SOURCE: Congressional Budget Office.

NOTE: The 1992 projection period begins in 1991; the 1995 projection, in 1994; and the current projection, in 1996.

4. Congressional Budget Office, *Projections of National Health Expenditures* (October 1992).

Table H-3.
Changes to CBO Projections of the Average Annual Rate of Growth in
Major Components of National Health Spending (Calendar years)

	1992 Projections (Projection period: 1991-2005)	1995 Projections (Projection period: 1994-2005)	Current Projections (Projection period: 1996-2007)
Projected Growth in Spending (Percent)			
Private Health Insurance	8.9	6.8	5.1
Medicare	10.9	10.0	8.6
Medicaid	14.3	9.8	7.8
National Health Expenditures ^a	9.3	7.6	6.2
Excess of Projected Growth in Spending over Projected Growth in Nominal GDP (Percentage points)			
Private Health Insurance	3.5	1.5	0.5
Medicare	5.5	4.7	3.9
Medicaid	8.9	4.6	3.1
National Health Expenditures ^a	4.0	2.3	1.5

SOURCE: Congressional Budget Office.

a. Also includes growth in other, smaller components such as out-of-pocket spending.

points faster than GDP in the projection period. The reduction from the historical average of 4.2 percentage points to the projection of 3.5 percentage points was mostly an acknowledgment of the sheer size of the health industry: as health became an ever-larger sector, its growth was sure to moderate in comparison with the growth of the economy as a whole, and private insurance would share in that moderation.

By late 1994, the health sector was experiencing a surge of competition and change. Rapid growth in health spending and weak economic growth in the early 1990s highlighted the *need* to control costs, and the development of new types of health plans expanded the *possibility* to do so. The market for health insurance became more competitive, and managed care plans were rapidly becoming the leaders in the industry.

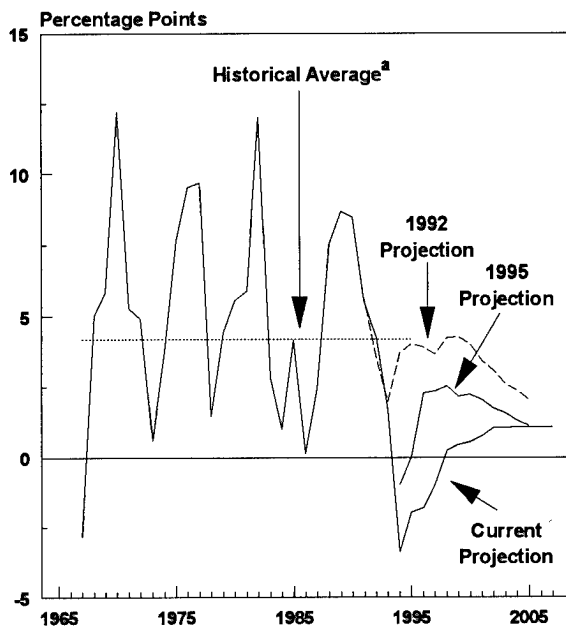
CBO's 1995 projections recognized that the sector had changed and that trends in the growth of premiums would not return to historically higher rates. CBO also assumed that the mid-1990s' surge of competition

would recede as the economy improved and that premiums would rise at a faster pace. That projection of private health insurance premiums averaged 6.8 percent a year between 1994 and 2005, or about 1.5 percentage points faster than GDP, reflecting the assumption that the environment for purchasing health insurance would remain more competitive than it had been.

Based on the most recent indicators of trends in health spending from HCFA and other sources, CBO has reduced the projection of growth in spending for private health insurance from 6.8 percent to 5.1 percent a year on average between 1996 and 2007.⁵ About 0.6 percentage points of that reduction stem from a lower forecast of overall economic growth in the projection period, and the remainder of the reduction stems from

5. For more information on historical health spending, see Katharine Levit and others, "National Health Expenditures, 1995," *Health Care Financing Review* (Fall 1996); and a forthcoming Congressional Budget Office paper on the measurement and implications of trends in private health expenditures.

Figure H-3.
Excess of Growth in Private Health Insurance
Premiums over GDP (By calendar year)



SOURCE: Congressional Budget Office.

NOTE: The 1992 projection period begins in 1991; the 1995 projection, in 1994; and the current projection, in 1996.

a. The historical average is 4.2 percentage points.

CBO's expectation of continued intense price competition in the health market.

The current projections assume, therefore, that private health insurance premiums will rise about 0.5 percentage points a year more than GDP on average—a reduction of about 1 percentage point from the previous projection. That reduction stems from two factors: first, premiums grew more slowly than expected in 1994 and 1995, so the projections start from a lower rate of growth; and second, CBO assumes that premiums will not grow as fast in the near term.

CBO assumes that as the economy continues at about full employment, workers and the employers who purchase health insurance on their behalf will focus less on low costs and more on high quality. Enrollees' preferences for higher quality will probably increase as the economic expansion continues and their pocketbooks swell. (The slower economic growth early in the 1990s

no doubt contributed to a focus on cost control that is now revealing itself in the marketplace.) Many states and the federal government have passed laws restricting some managed care techniques, and many employers are working to upgrade their quality assessments of plans. Both efforts will probably lead to higher growth of premiums in the coming years.

Compared with earlier projections, CBO now assumes that premium growth will accelerate more slowly. In the long run, Americans are likely to devote relatively more of their income to services like health care, and CBO projects that by 1998, premiums will again be growing faster than GDP. But the upward trend is more gradual in the current projections, because the new competitiveness is only now beginning in some parts of the country. Although the areas that have seen competitive pricing of health insurance for several years are likely to lead the acceleration that CBO expects, areas where competition is only now beginning to form may see premiums grow quite slowly, and that may act as a drag on growth of premiums in the country as a whole.

Alternative Trends in Premiums Are Possible

Because of the uncertainty about whether the new competition in health care purchasing would continue to offset the strong historical tendency toward rapid growth in spending, CBO's projections from 1995 included two illustrations of alternative paths for the growth of private health spending. The first assumed that the surge of competitive pricing for private health insurance in the mid-1990s was temporary and that rapid growth of spending would return. The second alternative assumed that competition among health plans would remain very strong and that spending would grow more slowly throughout the projection period.

In CBO's current projections, growth of premiums lies between the baseline projection made in 1995 and the low alternative presented at that time. Because the future growth of premiums is as uncertain as ever, the following section discusses two alternative paths for insurance spending: a return to trends projected by

CBO in 1995 (about 1.5 percentage points faster than GDP), and a path in which premiums grow about 0.5 percentage points more slowly than GDP throughout the projection period. These alternatives are not meant to set boundaries for the likely growth in spending for private health insurance premiums. Rather, they show other plausible paths for that spending.

Premiums could grow faster than CBO currently projects for several reasons. The so-called managed care backlash may prove stronger than CBO expects, and states and employers may take actions that would lead to more rapid growth in costs. Many fee-for-service plans, facing new competition from managed care plans, have recently kept premiums lower than the benefits they pay would otherwise indicate. If those plans increased their rates and their enrollees stayed with them, growth in premiums would accelerate.

Historically, the path of spending for private health insurance has been volatile, and any projection of its future course is uncertain. Given the upsurge of price awareness and competition over the past five years, however, trends in the growth of premiums are unlikely to return to historical rates in the foreseeable future. Even on this higher-growth path, the growth of premiums is well below its historical average.

Alternatively, premiums could continue to grow more slowly than GDP throughout the projection period. Employers now view health insurance as an important element of costs and may be unwilling to tolerate higher growth. If their employees remained amenable to more managed care, growth in premiums would slow. As a result of decades of growth with little constraint, considerable unused capacity remains in the health sector. Health plans can use that excess capacity to leverage lower costs from providers if employers demand it. And as managed care techniques improve, plans may find additional ways to improve quality at a pace that is tolerable to employers and employees without additional costs.

Although premiums for private health insurance rose several percentage points more slowly than GDP in 1994 and 1995, CBO's projection of strong economic growth makes that situation unlikely to persist over the projection period. This slower-growth path therefore assumes that the growth of premiums is only slightly below that of GDP.

Components of the Health Insurance Projections

HCFA's national health accounts are constructed from total payments by source of funds (including private insurance and Medicare, for example) and by type of service (the payments received by health providers such as hospitals, physicians, and so on). As managed care has come to dominate the health sector, the distinctions between types of health services have become more difficult to identify and probably less meaningful to health analysts. Therefore, CBO is not publishing projections of health expenditures by type of service this year.

CBO is expanding the projections of health insurance, however, to include additional details on spending by type of insurance coverage. Table H-4, produced in collaboration with the Joint Committee on Taxation, shows CBO's assumptions about premiums for individual coverage (including Medigap premiums) and employer and employee contributions to employment-based coverage. Table H-5 shows the assumptions used in the projections about the number of people whose primary insurance coverage comes from employment-based insurance, individually purchased insurance, Medicare, or Medicaid. It also includes those who are uninsured.

CBO projects that as more Medicare beneficiaries choose Medicare health maintenance organizations, the number of beneficiaries remaining in fee-for-service Medicare will shrink during the projection period. Assuming that the percentage of fee-for-service beneficiaries choosing to purchase Medigap plans remains constant over the next 10 years, the number of beneficiaries with Medigap coverage will also shrink. In CBO's projections, total payments for Medigap premiums will increase by about 6 percent a year, however, because the cost of Medicare coinsurance is expected to rise relatively quickly.

Given the assumption in CBO's current projections that health insurance premiums will grow more slowly in the coming years, businesses and employees would be better able to afford coverage. Therefore, CBO has

Table H-4.
Projections of Private Insurance Premiums (By calendar year)

Type of Insurance	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In Billions of Dollars												
Employment-Based Insurance												
Employer contributions	241	248	259	271	285	299	315	332	349	367	386	406
Employee/retiree contributions	<u>52</u>	<u>54</u>	<u>58</u>	<u>62</u>	<u>66</u>	<u>71</u>	<u>76</u>	<u>82</u>	<u>87</u>	<u>94</u>	<u>100</u>	<u>108</u>
Subtotal	292	302	317	333	351	370	391	413	436	461	487	514
Individual Insurance												
Medigap	15	15	16	17	18	20	21	22	24	25	27	28
Other	<u>12</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>22</u>	<u>23</u>
Subtotal	26	28	29	31	33	35	37	40	43	45	48	52
Total, Private Health Insurance	319	330	346	364	384	405	428	453	479	506	535	565
Annual Percentage Change												
Employment-Based Insurance												
Employer contributions	2	3	4	5	5	5	5	5	5	5	5	5
Employee/retiree contributions	4	5	6	7	7	7	7	7	7	7	7	7
All employment-based	2	3	5	5	5	5	6	6	6	6	6	6
Individual Insurance												
Medigap	6	6	6	6	6	7	6	6	7	6	6	6
Other	5	6	6	6	6	6	7	7	7	7	7	7
All individual insurance	6	6	6	6	6	6	6	6	7	7	7	7
All Private Health Insurance	3	4	5	5	5	6	6	6	6	6	6	6

SOURCES: Congressional Budget Office; Joint Committee on Taxation.

Table H-5.
Health Insurance Primary Coverage, Calendar Years 1996-2007, by Type of Coverage

Type of Coverage	1996 ^a	Projected										
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In Millions of People												
Private Insurance												
Employment-based ^b	153	154	155	155	156	157	158	159	159	160	161	162
Other	14	14	14	14	14	14	15	15	15	15	16	16
Medicare	35	35	36	36	36	37	37	38	38	39	39	40
Medicaid	23	23	23	23	24	24	24	25	25	25	26	26
Uninsured	<u>41</u>	<u>41</u>	<u>42</u>	<u>43</u>	<u>43</u>	<u>44</u>	<u>44</u>	<u>45</u>	<u>45</u>	<u>45</u>	<u>45</u>	<u>45</u>
Total	264	267	269	271	274	276	278	280	282	284	287	289
Percentage of Population												
Private Insurance												
Employment-based ^b	58	58	57	57	57	57	57	57	56	56	56	56
Other	5	5	5	5	5	5	5	5	5	5	5	5
Medicare	13	13	13	13	13	13	13	13	13	14	14	14
Medicaid	9	9	9	9	9	9	9	9	9	9	9	9
Uninsured	<u>15</u>	<u>15</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>
Total	100	100	100	100	100	100	100	100	100	100	100	100
Memorandum:												
Medigap Coverage (Millions of people)	11	10	10	10	10	10	10	10	9	9	9	9

SOURCE: Congressional Budget Office.

a. Data for 1996 are from the March 1996 Current Population Survey.

b. Includes coverage through the military, the Veterans Administration, and CHAMPUS (the Civilian Health and Medical Program of the Uniformed Services).

revised upward its projections of the increase in the number of people whose primary insurance coverage stems from employment-based plans. Despite that revision, however, and following a longer-term trend, the proportion of people with primary coverage through employers continues to drift down slightly throughout the projection period.

Two factors make projections of private insurance spending and coverage particularly uncertain. First, historical estimates of spending by type of insurance coverage are less current than the overall estimates of private and public health expenditures, making a disag-

gregated trend analysis more difficult. Second, because of data limitations, estimates and projections of insurance coverage are uncertain. The major source of historical information on insurance coverage is the March supplement to the Current Population Survey (CPS). Recent revisions to the CPS questionnaire, and changes in the associated interviewing methodology, have resulted in annual estimates of coverage that are not directly comparable from year to year. Without consistent historical time series of coverage rates, past trends in coverage are difficult to evaluate, and future trends are difficult to foresee.

Major Contributors to the Revenue and Spending Projections

The following Congressional Budget Office analysts prepared the revenue and spending projections in this report:

Revenue Projections

Mark Booth	Corporate income taxes, Federal Reserve System earnings, excise taxes
Peter Ricoy	Social insurance contributions, estate and gift taxes
Sean Schofield	Excise taxes
David Weiner	Individual income taxes
Stephanie Weiner	Customs duties, miscellaneous receipts

Spending Projections

Defense, International Affairs, and Veterans' Affairs

Valerie Barton	Military retirement, veterans' education
Shawn Bishop	Veterans' health care, military health care
Kent Christensen	Defense (military construction, base closures)
Jeannette Deshong	Defense (Army weapons, mobility forces, intelligence programs)
Sunita D'Monte	International affairs (conduct of foreign affairs and information exchange activities), veterans' housing
Raymond Hall	Defense (Navy weapons, missile defenses, atomic energy defense)
Mary Helen Petrus	Veterans' compensation, pensions
Amy Plapp	Defense (personnel)
JoAnn Vines	Defense (tactical air forces, bombers)
Joseph Whitehill	International affairs (development, security, international financial institutions)

Health

Tom Bradley	Medicare Part A, managed care
Cynthia Dudzinski	Public Health Service, Medicare
Jean Hearne	Medicaid
Anne Hunt	Public Health Service, Medicare
Jennifer Jenson	Public Health Service, Medicare
Jeffrey Lemieux	Medicare Part B, Federal employee health benefits, national health expenditures
Robin Rudowitz	Medicaid, Medicare, long-term care

Human Resources

Wayne Boyington	Civil Service Retirement, Social Security, Pension Benefit Guarantee Corporation
Sheila Dacey	Aid to Families with Dependent Children, child support enforcement
Christie Hawley	Unemployment insurance, training programs
Deborah Kalcevic	Education
Justin Latus	Education, foster care, child care
Carla Pedone	Housing assistance
Dorothy Rosenbaum	Social services, food stamps, child nutrition
Kathy Ruffing	Supplemental Security Income, Social Security

Natural and Physical Resources

Gary Brown	Water resources, other natural resources
Kim Cawley	Energy, pollution control and abatement
Elizabeth Daley	Community and regional development, disaster assistance
Clare Doherty	Transportation
Rachel Forward	Commerce, spectrum auction receipts, credit unions
Mark Grabowicz	Justice, Postal Service
Kathleen Gramp	Energy, science and space
Victoria Heid	Conservation and land management, Outer Continental Shelf receipts
David Hull	Agriculture
Craig Jagger	Agriculture
James Langley	Agriculture
Mary Maginniss	Deposit insurance, legislative branch
Karen McVey	Transportation
Susanne Mehlman	Justice, Federal Housing Administration, mortgage guarantees
David Moore	Spectrum auction receipts
Deborah Reis	Recreation, water transportation
John Righter	General government

Other

Janet Airis	Appropriation bills
Edward Blau	Authorization bills
Jodi Capps	Appropriation bills
Betty Embrey	Appropriation bills
Kenneth Farris	Computer support
Mary Froehlich	Computer support

Vernon Hammett	Computer support
Sandra Hoffman	Computer support
Jeffrey Holland	Net interest on the public debt
Daniel Kowalski	Credit programs, other interest
Catherine Mallison	Appropriation bills
Robert Sempsey	Appropriation bills
Michael Simpson	National income and product accounts, historical budget data
Jennifer Winkler	Budget projections, civilian agency pay

Glossary

This glossary defines economic and budgetary terms as they relate to this report. Some entries sacrifice precision for brevity and clarity to the lay reader. Where appropriate, sources of data for economic variables are indicated as follows:

- o BLS denotes the Bureau of Labor Statistics in the Department of Labor;
- o CBO denotes the Congressional Budget Office;
- o FRB denotes the Federal Reserve Board; and
- o NBER denotes the National Bureau of Economic Research.

adjustable-rate mortgage: Mortgage whose interest rate is not fixed for the life of the mortgage but varies in a predetermined way with movements in a specified market interest rate.

aggregate demand: Total purchases of a country's output of goods and services by consumers, businesses, government, and foreigners during a given period. (Bureau of Economic Analysis)

appropriation act: A statute under the jurisdiction of the House and Senate Committees on Appropriations that provides budget authority. Enactment generally follows adoption of authorizing legislation unless the authorization itself provides the budget authority. Currently, 13 regular appropriation acts are enacted each year. When necessary, the Congress may enact supplemental or continuing appropriations.

authorization: A substantive law that sets up or continues a federal program or agency. Authorizing legislation is normally a prerequisite for appropriations. For some programs, the authorizing legislation itself provides the authority to incur obligations and make payments.

Balanced Budget and Emergency Deficit Control Act of 1985: Also known as Gramm-Rudman-Hollings or the Balanced Budget Act, this law set forth specific deficit targets and a sequestration procedure to reduce spending if the targets were exceeded. The Budget Enforcement Act of 1990 established new budget procedures through fiscal year 1995 as well as revised targets, which exclude the Social Security trust funds. The Omnibus Budget Reconciliation Act of 1993 further extended various provisions of the Balanced Budget Act, without including fixed deficit targets beyond fiscal year 1995. See **discretionary spending caps** and **pay-as-you-go**.

baseline: A benchmark for measuring the budgetary effects of proposed changes in federal revenues or spending. As specified in the Budget Enforcement Act of 1990 (BEA), the baseline for revenues and entitlement spending generally assumes that laws now on the statute books will continue. The discretionary spending projections are based on the discretionary spending caps set by the BEA in 1995 through 1998. The *baseline with discretionary inflation* adjusts discretionary appropriations for inflation; the *baseline without discretionary inflation* does not.

Blue Chip consensus forecast: The average of about 50 economic forecasts surveyed by Eggert Economic Enterprises, Inc.

budget authority: Legal authority to incur financial obligations that will result in the spending of federal government funds. Budget authority may be provided in an authorization or an appropriation act. Offsetting collections, including offsetting receipts, constitute negative budget authority.

budget deficit: Amount by which budget outlays exceed budget revenues during a given period.

Budget Enforcement Act of 1990 (BEA): Title XIII of the Omnibus Budget Reconciliation Act of 1990. This act amended both the Congressional Budget Act of 1974 and the Balanced Budget and Emergency Deficit Control Act of 1985. The BEA provided for new budget targets, sequestration procedures, pay-as-you-go procedures, credit reform, and various other changes. The discretionary spending caps and the pay-as-you-go process were extended through 1998 by the Omnibus Budget Reconciliation Act of 1993. See **discretionary spending caps** and **pay-as-you-go**.

budget function: One of 20 areas into which federal spending and credit activity are divided. National needs are grouped into 17 broad budget functions, including national defense, international affairs, energy, agriculture, health, income security, and general government. Three functions--net interest, allowances, and undistributed offsetting receipts--do not address national needs but are included to complete the budget.

budget resolution: A resolution, passed by both Houses of Congress, that sets forth a Congressional budget plan for the next five years. The plan must be carried out through subsequent legislation, including appropriations and changes in tax and entitlement laws. The resolution sets guidelines for Congressional action, but it is not signed by the President and does not become law. The Congressional Budget Act of 1974 established a number of mechanisms that are designed to hold spending and revenues to the targets established in the budget resolution.

budgetary resources: All sources of budget authority that are subject to sequestration. Budgetary resources include new budget authority, unobligated balances, direct spending authority, and obligation limitations. See **sequestration**.

business cycle: Fluctuations in overall business activity accompanied by swings in the unemployment rate, interest rates, and profits. Over a business cycle, real activity rises to a peak (its highest level during the cycle), then falls until it reaches its trough (its lowest level following the peak), whereupon it starts to rise again, defining a new cycle. Business cycles are irregular, varying in frequency, magnitude, and duration. (NBER)

capacity constraints: Limits on the amount of output that can be produced without also significantly increasing prices. Causes of capacity constraints include shortages of skilled labor or of capital needed for production.

capacity utilization rate: The seasonally adjusted output of the nation's factories, mines, and electric and gas utilities expressed as a percentage of their capacity to produce output. Capacity is defined as the greatest output a plant can maintain with a normal work pattern. (FRB)

capital: *Physical capital* is the output that has been set aside to be used in production rather than consumed. According to the national income and product accounts, private capital goods are composed of residential and nonresidential structures, producers' durable equipment, and business inventories. *Financial capital* is the funds raised by an individual, business, or government by issuing securities, such as a mortgage, stock certificate, or bond. *Human capital* is a term for education, training, health, and other attributes of the workforce that increase its ability to produce goods and services.

central bank: A government-established agency responsible for conducting monetary policy and overseeing credit conditions. The Federal Reserve System fulfills those functions in the United States.

chain-type GDP price index: An overall measure of the price level in which the calculation of the change in prices uses the composition of output in adjoining years. This price index is currently set to equal one in 1992. Because this measure uses the composition of output in adjoining years, it is a more accurate measure of the way in which price change affects economic welfare than either the GDP implicit deflator or the fixed-weighted GDP price index. Compare with **implicit deflator** and **fixed-weighted price index**. (Bureau of Economic Analysis)

chained (1992) GDP: A measure of real economic output (economic output adjusted to remove the effects of inflation) in which prices in adjoining years are used to calculate the growth rate for total output. Chained (1992) GDP is set to equal nominal GDP in 1992. Because this measure uses prices in recent periods, it is a more accurate measure of real growth than traditional constant-dollar measures that use prices for a specific base year. See **gross domestic product (GDP)** and **constant dollar**. (Bureau of Economic Analysis)

civilian unemployment rate: Unemployment as a percentage of the civilian labor force--that is, the labor force excluding armed forces personnel. (BLS)

commercial paper: Short-term, unsecured debt obligations that are issued by large corporations with good credit ratings and that are actively traded in financial markets. By selling such obligations, issuers of commercial paper borrow directly from the public rather than indirectly through financial intermediaries such as commercial banks.

compensation: All income due to employees for their work during a given period. Compensation includes wages and salaries as well as fringe benefits and employers' share of social insurance taxes. (Bureau of Economic Analysis)

constant dollar: Measured in terms of prices of a base period to remove the effects of inflation. Compare with **current dollar**.

consumer confidence: A measure of consumer attitudes and buying plans indicated by an index of consumer sentiment. One such index is constructed by the University of Michigan Survey Research Center based on surveys of consumers' views of the state of the economy and their personal finances, both current and prospective.

consumer durable goods: Goods bought by households for their personal use that, on average, last more than three years--for example, automobiles, furniture, or appliances.

consumption: Total purchases of goods and services during a given period by households for their own use. (Bureau of Economic Analysis)

cost of capital: The total expected rate of return that an investment must generate in order to provide investors with the prevailing market yield consistent with risk after accounting for corporate taxes (if applicable) and depreciation.

countercyclical: Acting to moderate the ups and downs of the business cycle.

CPI-U: An index of consumer prices based on the typical market basket of goods and services consumed by all urban consumers during a base period--currently 1982 through 1984. (BLS)

credit crunch: A significant, temporary decline in the normal supply of credit, usually caused by tight monetary policy or a regulatory restriction on lending institutions.

credit reform: A revised system of budgeting for federal credit activities that focuses on the cost of subsidies conveyed in federal credit assistance. The system was authorized by the Federal Credit Reform Act of 1990, which was part of the Budget Enforcement Act of 1990.

credit subsidies: The estimated long-term costs to the federal government of direct loans or loan guarantees calculated on the basis of net present value, excluding administrative costs and any incidental effects on governmental receipts or outlays. For direct loans, the subsidy cost is the net present value of loan disbursements minus repayments of interest and principal, adjusted for estimated defaults, prepayments, fees, penalties, and other recoveries. For loan guarantees, the subsidy cost is the net present value of the estimated payments by the government to cover defaults and delinquencies, interest subsidies, or other payments, offset by any payments to the government, including origination and other fees, penalties, and recoveries. See **present value**.

currency value: See **exchange rate**.

current-account balance: The net revenues that arise from a country's international sales and purchases of goods and services, net international transfers (public or private gifts or donations), and net factor income (primarily capital income from foreign-located property owned by residents minus capital income from domestic property owned by nonresidents). The current-account balance differs from net exports in that it includes international transfers and net factor income. (Bureau of Economic Analysis)

current dollar: Measured in the dollar value--reflecting prices that prevailed then--of the period under consideration. Compare with **constant dollar**.

cyclical deficit: The part of the budget deficit that results from cyclical factors rather than from underlying fiscal policy. The cyclical deficit reflects the fact that, when GDP falls, revenues automatically fall and outlays automatically rise. By definition, the cyclical deficit is zero when the economy is operating at potential GDP. Compare with **standardized-employment deficit**. (CBO)

debt held by the public: Debt issued by the federal government and held by nonfederal investors (including the Federal Reserve System).

debt restructuring: Changing the characteristics, such as maturity or interest rate, of an entity's outstanding debt. Such changes can be effected by issuing long-term debt and retiring short-term debt (or vice versa), or by negotiating with creditors.

debt service: Payment of scheduled interest obligations on outstanding debt.

deflator: See **implicit deflator**.

deposit insurance: The guarantee by a federal agency that an individual depositor at a participating depository institution will receive the full amount of the deposit (up to \$100,000) if the institution becomes insolvent.

depository institutions: Financial intermediaries that make loans to borrowers and obtain funds from savers by accepting deposits. Depository institutions are commercial banks, savings and loan institutions, mutual savings banks, and credit unions.

depreciation: Decline in the value of a currency, financial asset, or capital good. When applied to a capital good, depreciation usually refers to loss of value because of obsolescence or wear.

direct spending: The Budget Enforcement Act of 1990 defines direct spending as (a) budget authority provided by an authorization, (b) entitlement authority (including mandatory spending contained in appropriation acts), and (c) the Food Stamp program. A synonym is **mandatory spending**. Compare with **discretionary spending**.

discount rate: The interest rate the Federal Reserve System charges on a loan that it makes to a bank. Such loans, when allowed, enable a bank to meet its reserve requirements without reducing its loans.

discouraged workers: Jobless people who are available for work but who are not actively seeking it because they think they have poor prospects of finding jobs. Because they are not actively seeking jobs, discouraged workers are not counted as part of the labor force or as being unemployed. (BLS)

discretionary spending: Spending for programs whose funding levels are determined through the appropriation process. The Congress has the discretion each year to determine how many dollars will be devoted to continuing current programs and funding new ones. Compare with **direct spending**.

discretionary spending caps: Annual ceilings through fiscal year 1998 on budget authority and outlays for discretionary programs defined in the Balanced Budget Act of 1985, as amended by the Budget Enforcement Act of 1990 and the Omnibus Budget Reconciliation Act of 1993. One cap covers appropriations from the Violent Crime Reduction Trust Fund. A separate cap covers all other (that is, general-purpose) discretionary spending. Discretionary spending caps are enforced through Congressional rules and sequestration procedures.

disposable (personal) income: Income received by individuals, including transfer payments, minus personal taxes and fees paid to government. (Bureau of Economic Analysis)

domestic demand: Total purchases of goods and services, regardless of origin, by U.S. consumers, businesses, and governments during a given period. Domestic demand equals gross domestic product minus net exports. (Bureau of Economic Analysis)

entitlements: Programs that make payments to any person, business, or unit of government that seeks the payments and meets the criteria set in law. The Congress controls these programs indirectly by defining eligibility and setting the benefit or payment rules. Although the level of spending for these programs is controlled by the authorizing legislation, funding may be provided in either an authorization or an appropriation act. The best-known entitlements are the major benefit programs, such as Social Security and Medicare. See **direct spending**.

excess reserves: Total monetary reserves in excess of required reserves. See **monetary reserves** and **reserve requirements**.

exchange rate: The number of units of a foreign currency that can be bought with one unit of the domestic currency. (FRB)

excise tax: A tax levied on the purchase of a specific type of good or service, such as tobacco products or telephone services.

expansion: A phase of the business cycle that extends from a trough to the next peak. See **business cycle**. (NBER)

federal funds: See **trust fund**.

federal funds rate: Overnight interest rate at which financial institutions borrow and lend monetary reserves. A rise in the federal funds rate (compared with other short-term rates) suggests a tightening of monetary policy, whereas a fall suggests an easing. (FRB)

Federal Open Market Committee (FOMC): The group within the Federal Reserve System that determines the direction of monetary policy. The open market desk at the Federal Reserve Bank of New York implements the policy with open market operations--the purchase or sale of government securities--which influence short-term interest rates

and the growth of the money supply. The FOMC is composed of 12 members, including the seven members of the Board of Governors of the Federal Reserve System and five of the 12 presidents of the regional Federal Reserve Banks.

Federal Reserve System: As the central bank of the United States, the Federal Reserve is responsible for conducting the nation's monetary policy and overseeing credit conditions.

final sales to domestic purchasers: Gross domestic product minus both net exports and the change in business inventories during a given period. (Bureau of Economic Analysis)

financial intermediary: An institution that indirectly matches borrowers with lenders. For example, depository institutions, such as commercial banks or savings and loan institutions, lend funds that they have accepted from depositors. Nondepository institutions, such as life insurance companies or pension funds, lend or invest funds that they hold in reserve against future claims by policyholders or participating retirees.

financing account: Any account established under credit reform to finance the portion of federal direct loans and loan guarantees not subsidized by federal funds. Since these accounts are used only to finance the nonsubsidized portion of federal credit activities, they are excluded from the federal budget and considered a means of financing the deficit.

fiscal policy: The government's choice of tax and spending programs, which influences the amount and maturity of government debt as well as the level, composition, and distribution of national output and income. An "easy" fiscal policy stimulates the short-term growth of output and income, whereas a "tight" fiscal policy restrains their growth. Movements in the standardized-employment deficit constitute one overall indicator of the tightness or ease of federal fiscal policy; an increase relative to potential gross domestic product suggests fiscal ease, whereas a decrease suggests fiscal restriction. The President and the Congress jointly determine federal fiscal policy.

fiscal year: A yearly accounting period. The federal government's fiscal year begins October 1 and ends September 30. Fiscal years are designated by the calendar years in which they end--for example, fiscal year 1996 began October 1, 1995, and will end on September 30, 1996.

fixed-weighted price index: An index that measures the overall price level (compared with a base period) without being influenced by changes in the composition of output or purchases. Compare with **implicit deflator** and **chain-type GDP price index**.

GDP: See **gross domestic product**.

GDP gap: The difference between potential real GDP and real GDP, expressed as a percentage of potential real GDP. See **potential real GDP**.

GNP: See **gross national product**.

government purchases of goods and services: Purchases from the private sector (including compensation of government employees) made by government during a given period. Government purchases constitute a component of GDP, but they encompass only a portion of all government expenditures because they exclude transfer payments (such as grants to state and local governments and net interest paid). (Bureau of Economic Analysis)

government-sponsored enterprises: Enterprises established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency, but in all cases wholly owned by stockholders rather than the government. Major examples are the Federal National Mortgage Association, the Student Loan Marketing Association, and the Federal Home Loan Banks.

grants: Transfer payments from the federal government to state and local governments or other recipients to help fund projects or activities that do not involve substantial federal participation.

grants-in-aid: Grants from the federal government to state and local governments to help provide for programs of assistance or service to the public.

gross domestic product (GDP): The total market value of all goods and services produced domestically during a given period. The components of GDP are consumption, gross domestic investment, government purchases of goods and services, and net exports. (Bureau of Economic Analysis)

gross investment: A measure of additions to the capital stock that does not subtract depreciation of existing capital.

gross national product (GNP): The total market value of all goods and services produced in a given period by labor and property supplied by residents of a country, regardless of where the labor and property are located. GNP differs from GDP primarily by including the excess of capital income that residents earn from investments abroad over capital income that nonresidents earn from domestic investment.

implicit deflator: An overall measure of the price level (compared with a base period) given by the ratio of current-dollar purchases to constant-dollar purchases. Changes in an implicit deflator, unlike those in a fixed-weighted price index, reflect changes in the composition of purchases as well as in the prices of goods and services purchased. See **fixed-weighted price index** and **chain-type GDP price index**. (Bureau of Economic Analysis)

index: An indicator or summary measure that defines the overall level (compared with a base) of some aggregate--such as the general price level or total quantity--in terms of the levels of its components.

inflation: Growth in a measure of the general price level, usually expressed as an annual rate of change.

infrastructure: Government-owned capital goods that provide services to the public, usually with benefits to the community at large as well as to the direct user. Examples include schools, roads, bridges, dams, harbors, and public buildings.

inventories: Stocks of goods held by businesses either for further processing or for sale. (Bureau of Economic Analysis)

investment: *Physical investment* is the current product set aside during a given period to be used for future production; in other words, an addition to the stock of capital goods. As measured by the national income and product accounts, private domestic investment consists of investment in residential and nonresidential structures, producers' durable equipment, and the change in business inventories. *Financial investment* is the purchase of a financial security. *Investment in human capital* is spending on education, training, health services, and other activities that increase the productivity of the workforce. Investment in human capital is not treated as investment in the national income and product accounts.

labor force: The number of people who have jobs or who are available for work and are actively seeking jobs. *Labor force participation rate* is the labor force as a percentage of the noninstitutional population age 16 years or older. (BLS)

liquidating account: Any budgetary account established under credit reform to finance direct loan and loan guarantee activities that were obligated or committed before October 1, 1992 (the effective date of credit reform).

liquidity: The characteristic of an asset that permits it to be sold on short notice with little or no loss in value. Ordinarily, a shorter term to maturity or a lower risk of default will enhance an asset's liquidity.

long-term interest rate: The interest rate earned by a note or bond that matures in 10 or more years.

M2: A measure of the U.S. money supply that consists of the nonbank public's holdings of currency, traveler's checks, and checking accounts (collectively known as M1); small (less than \$100,000) time and savings accounts; money market deposit accounts held at depository institutions; most money market mutual funds; overnight repurchase agreements; and overnight Eurodollar accounts held by U.S. residents. (FRB)

mandatory spending: Another term for **direct spending**.

marginal tax rate: The tax rate that applies to an additional dollar of taxable income.

means of financing: Ways to finance federal deficits or use federal surpluses. The largest means of financing is normally federal borrowing from the public, but other means of financing include any transaction that causes a difference between the federal (including off-budget) surplus or deficit and the change in debt held by the public. The means of financing include changes in checks outstanding and Treasury cash balances, seigniorage (that is, government revenue from the manufacture of money), and the transactions of the financing accounts established under credit reform.

means-tested programs: Programs that provide cash or services to people who meet a test of need based on income and assets. Most means-tested programs are entitlements--for example, Medicaid, the Food Stamp program, Supplemental Security Income, family support, and veterans' pensions--but a few, such as subsidized housing and various social services, are funded through discretionary appropriations.

merchandise trade balance: Net exports of goods. The merchandise trade balance differs from net exports by excluding exports and imports of services. (Bureau of Economic Analysis)

monetary policy: The strategy of influencing movements of the money supply and interest rates to affect output and inflation. An "easy" monetary policy suggests faster money growth and initially lower short-term interest rates in an attempt to increase aggregate demand, but it may lead to a higher rate of inflation. A "tight" monetary policy suggests slower money growth and higher interest rates in the near term in an attempt to reduce inflationary pressure by reducing aggregate demand. The Federal Reserve System conducts monetary policy in the United States.

monetary reserves: The amount of funds that banks and other depository institutions hold as cash or as deposits with the Federal Reserve System. See **reserve requirements**.

money supply: Private assets that can readily be used to make transactions or are easily convertible into assets that can. See **M2**.

NAIRU (nonaccelerating inflation rate of unemployment): The unemployment rate consistent with a constant inflation rate. An unemployment rate greater than the NAIRU indicates downward pressure on inflation, whereas a lower unemployment rate indicates upward pressure on inflation. Estimates of the NAIRU are based on the historical relationship between inflation and the aggregate unemployment rate. CBO's procedures for estimating the NAIRU are described in Appendix B of *The Economic and Budget Outlook: An Update* (August 1994).

national income and product accounts (NIPAs): Official U.S. accounts that detail the composition of GDP and how the costs of production are distributed as income. (Bureau of Economic Analysis)

national saving: Total saving by all sectors of the economy: personal saving, business saving (corporate after-tax profits not paid as dividends), and government saving (budget surplus or deficit--indicating dissaving--of all government entities). National saving represents all income not consumed, publicly or privately, during a given period. (Bureau of Economic Analysis)

net exports: Exports of goods and services produced in a country minus its imports of goods and services produced elsewhere.

net interest: *In the federal budget*, net interest includes federal interest payments to the public as recorded in budget function 900. Net interest also includes, as an offset, interest income received by the government on loans and cash balances. *In the national income and product accounts (NIPAs)*, net interest is the income component of GDP paid as interest--primarily interest that domestic businesses pay, minus interest they receive. The NIPAs treat government interest payments as transfers, so they are not part of GDP.

net national saving: National saving less depreciation of physical capital.

NIPAs: See **national income and product accounts**.

nominal: Measured in the dollar value (as in nominal output, income, or wage rate) or in market terms (as in nominal exchange or interest rate) of the period under consideration. Compare with **real**.

nonresidential structures: Primarily business buildings (such as industrial, office, and other commercial buildings) and structures (such as mining and well shafts). (Bureau of Economic Analysis)

off-budget: Spending or revenues excluded from the budget totals by law. The revenues and outlays of the two Social Security trust funds and the transactions of the Postal Service are off-budget and (except for discretionary Social Security administrative costs) are not included in any Budget Enforcement Act calculations.

offsetting receipts: Funds collected by the federal government that are recorded as negative budget authority and outlays and credited to separate receipt accounts. More than half of offsetting receipts are intragovernmental receipts that reflect agencies' payments to retirement and other funds on behalf of their employees; those receipts simply balance payments elsewhere in the budget. An additional category of receipts (proprietary receipts) come from the public and generally represent voluntary, business-type transactions. The largest items are the flat premiums for Supplementary Medical Insurance (Part B of Medicare), timber and oil lease receipts, and proceeds from the sale of electric power.

outlays: Spending to fulfill a federal obligation, generally by issuing a check or disbursing cash. Unlike outlays for other categories of spending, outlays for interest on the public debt are counted when the interest is earned, not when it is paid. Outlays may be for payment of obligations incurred in previous fiscal years or in the same year. Outlays, therefore, flow in part from unexpended balances of prior year budget authority and in part from budget authority provided for the current year.

pay-as-you-go (PAYGO): A procedure required in the Budget Enforcement Act of 1990 to ensure that, for fiscal years 1991 through 1995, legislation affecting direct spending and receipts did not increase the deficit. The pay-as-you-go process was extended through fiscal year 1998 by the Omnibus Budget Reconciliation Act of 1993. Pay-as-you-go is enforced through Congressional rules and sequestration procedures.

peak: See **business cycle**.

personal saving: Saving by households. Personal saving equals disposable personal income minus spending for consumption and interest payments. *Personal saving rate* is personal saving as a percentage of disposable personal income. (Bureau of Economic Analysis)

point-year of unemployment: An unemployment rate that is 1 percentage point above the NAIRU for one year. For example, if the unemployment rate averaged 2 percentage points above the NAIRU for one and one-half years, that would be three point-years of unemployment. See **NAIRU**.

potential real GDP: The highest level of real GDP that could persist for a substantial period without raising the rate of inflation. CBO's calculation relates potential GDP to the nonaccelerating inflation rate of unemployment, which is the unemployment rate consistent with a constant inflation rate. (CBO)

present value: A single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The calculation of present value depends on the rate of interest. For example, given an interest rate of 5 percent, today's 95 cents will grow to \$1 next year. Hence, the present value of \$1 payable a year from today is only 95 cents.

private saving: Saving by households and businesses. Private saving is equal to personal saving plus after-tax corporate profits minus dividends paid. (Bureau of Economic Analysis)

producers' durable equipment: Primarily nonresidential capital equipment--such as computers, machines, and transportation equipment--owned by businesses. (Bureau of Economic Analysis)

productivity: Average real output per unit of input. *Labor productivity* is average real output per hour of labor. The growth of labor productivity is defined as the growth of real output that is not explained by the growth of labor input alone. *Total factor productivity* is average real output per unit of combined labor and capital inputs. The growth of total factor productivity is defined as the growth of real output that is not explained by the growth of labor and capital. Labor productivity and total factor productivity differ in that increases in capital per worker would raise labor productivity but not total factor productivity. (BLS)

program account: Any budgetary account that finances credit subsidies and the costs of administering credit programs.

real: Adjusted to remove the effects of inflation. *Real (constant-dollar) output* represents volume, rather than dollar value, of goods and services. *Real income* represents power to purchase real output. *Real data* are usually constructed by dividing the corresponding nominal data, such as output or a wage rate, by a price index or deflator. *Real interest rate* is a nominal interest rate minus the expected inflation rate. Compare with **nominal**.

receipt account: Any budget or off-budget account that is established exclusively to record the collection of income, including negative subsidies. In general, receipt accounts that collect money arising from the exercise of the government's sovereign powers are included as revenues, whereas the proceeds of intragovernmental transactions or collections from the public arising from business-type transactions (such as interest income, proceeds from the sale of property or products, or profits from federal credit activities) are included as offsetting receipts--that is, credited as offsets to outlays rather than included in receipts.

recession: A phase of the business cycle extending from a peak to the next trough--usually lasting six months to a year--and characterized by widespread declines in output, income, employment, and trade in many sectors of the economy. Real GDP usually falls throughout a recession. See **business cycle**. (NBER)

reconciliation: A process the Congress uses to make its tax and spending legislation conform with the targets established in the budget resolution. The budget resolution may contain reconciliation instructions directing certain Congressional committees to achieve deficit reduction through changes in tax or spending programs under their jurisdiction. Legislation to implement the reconciliation instructions is usually combined in one comprehensive bill. The reconciliation process primarily affects taxes, entitlement spending, and offsetting receipts. As a general rule, decisions on discretionary programs are determined separately through the appropriation process, which is also governed by allocations in the budget resolution.

recovery: A phase of the business cycle that lasts from a trough until overall economic activity returns to the level it reached at the previous peak. See **business cycle**. (NBER)

reserve requirements: The amount of funds that banks and other depository institutions must hold as cash or as deposits with the Federal Reserve System. The Federal Reserve specifies reserve requirements depending on the level of deposits. Such requirements reduce the risk of bank failure and allow the Federal Reserve to influence the money supply. (FRB)

reserves: See **monetary reserves**.

residential investment: Investment in housing, primarily for construction of new single-family and multifamily housing and alterations plus additions to existing housing. (Bureau of Economic Analysis)

retained earnings: Corporate profits after tax that are used for investment rather than paid out as dividends to stockholders. (Bureau of Economic Analysis)

revenues: Funds collected from the public arising from the sovereign power of the government. Revenues consist of receipts from income taxes (individual and corporate), excise taxes, and estate and gift taxes; social insurance contributions; customs duties; miscellaneous receipts such as Federal Reserve earnings, gifts, and contributions; and fees and fines. Revenues are also known as federal governmental receipts but do not include offsetting receipts, which are recorded as negative budget authority and outlays.

sequestration: The cancellation of budgetary resources to enforce the discretionary spending caps and pay-as-you-go process established under the Budget Enforcement Act of 1990 and the Omnibus Budget Reconciliation Act of 1993. Sequestration is triggered if the Office of Management and Budget determines that discretionary appropriations exceed the discretionary spending caps or that legislation affecting direct spending and receipts increases the deficit. Changes in direct spending and receipt legislation that increase the deficit would result in reductions in funding for entitlements not otherwise exempted by law. Discretionary spending in excess of the caps would cause the cancellation of budgetary resources within the discretionary spending category.

short-term interest rate: The interest rate earned by a debt instrument that will mature within one year.

standardized-employment deficit: The level of the federal budget deficit that would occur under current law if the economy was operating at potential GDP. It provides a measure of underlying fiscal policy by removing the influence of cyclical factors from the budget deficit. Compare with **cyclical deficit**. (CBO)

structural deficit: Same as **standardized-employment deficit**.

supply shock: A large and unexpected change in the production of a good or service. Examples include bumper crops, crop failures, or sudden restrictions on the supply of oil as occurred in 1973-1974 and 1979-1980. A supply shock that restricts output will raise the price of the good in short supply; a surfeit will lower the price of the good.

ten-year Treasury note: Interest-bearing note issued by the U.S. Treasury that is redeemed in 10 years.

three-month Treasury bill: Security issued by the U.S. Treasury that is redeemed in 91 days.

thrift institutions: Savings and loan institutions and mutual savings banks.

total factor productivity: See *productivity*.

transfer payments: Payments in return for which no good or service is currently received--for example, welfare or Social Security payments or money sent to relatives abroad. (Bureau of Economic Analysis)

trough: See *business cycle*.

trust fund: A fund, designated as a trust fund by statute, that is credited with income from earmarked collections and charged with certain outlays. Collections may come from the public (for example, taxes or user charges) or from intrabudgetary transfers. More than 150 federal government trust funds exist, of which the largest and best known finance several major benefit programs (including Social Security and Medicare) and certain infrastructure spending (the Highway and the Airport and Airway trust funds). The term "federal funds" refers to all programs that are not trust funds.

underlying rate of inflation: Rate of inflation of a modified CPI-U that excludes from the market basket the components most volatile in price--food, energy, and used cars.

unemployment: Joblessness. The measure of unemployment is the number of jobless people who are available for work and are actively seeking jobs. The *unemployment rate* is unemployment as a percentage of the labor force. (BLS)

yield: The average annual rate of return on a security, including interest payments and repayment of principal, if held to maturity.

yield curve: The relationship formed by plotting the yields of otherwise comparable fixed-income securities against their terms of maturity. Typically, yields increase as maturities lengthen. The rate of this increase determines the "steepness" or "flatness" of the yield curve. Ordinarily a steepening (or flattening) of the yield curve is taken to suggest that relatively short-term interest rates are expected to be higher (or lower) in the future than they are now.

ERRATA

The Economic and Budget Outlook: Fiscal Years 1998-2007

Estimates of the standardized-employment deficit and related series were incorrectly reported in the text on page 10, in Tables 1-2, F-1, F-2, and F-3, and in Figure 2-1. Corrected text, tables, and figures are attached.

The last two sentences of the third full paragraph on page 13 should read:

The two-year average forecasts of CBO and the *Blue Chip* are virtually indistinguishable. However, more than 60 percent of the respondents to a recent *Blue Chip* survey expect a recession before the end of 1998.²

The first sentence of Appendix C should read:

In June 1995, the Congress adopted a budget resolution for fiscal year 1996 that anticipated a deficit of \$170.3 billion.

the decline in that measure over recent years has been sizable, plunging from 3.8 percent of potential GDP in 1993 to 1.7 percent in 1996 (Table 1-2). Although the standardized-employment deficit declined more rapidly in individual years, the drop from 1993 to 1996 is the largest sustained decline in the past four decades (see Figure 1-9). Nearly \$100 billion of the decline in the standardized deficit between 1993 and 1996—or 1.3 percent of potential GDP—represents the cumulative effects of legislation enacted since January 1993. That portion of the overall decline in the standardized deficit unambiguously represents fiscal restraint. The size and duration of that restraint may have contributed to keeping a lid on interest rates during the protracted expansion after the 1990-1991 recession.

Does the remaining portion of the drop in the standardized deficit represent fiscal restraint? The question arises because of uncertainty about how best to measure overall economic growth in the national income and product accounts for recent years: whether to use the growth reported for production or the growth reported for incomes.

In principle, the sum of all components of economic production should equal the sum of all disburse-

ments of income. In practice, however, those totals differ, largely because the Bureau of Economic Analysis uses different primary data sources to measure the components of product on the one hand and income on the other. The resulting statistical discrepancy (the difference between the product-side sum and the income-side sum) has been sizable in recent years. More important, between fiscal years 1993 and 1996, the discrepancy has swung from \$63.2 billion (more measured product than income) in fiscal year 1993 to minus \$63.1 billion (more measured income than product) in fiscal year 1996. That large shift is tantamount to a \$126 billion increase in incomes that, for one reason or another, GDP does not reflect (GDP is based on the product side of the accounts).

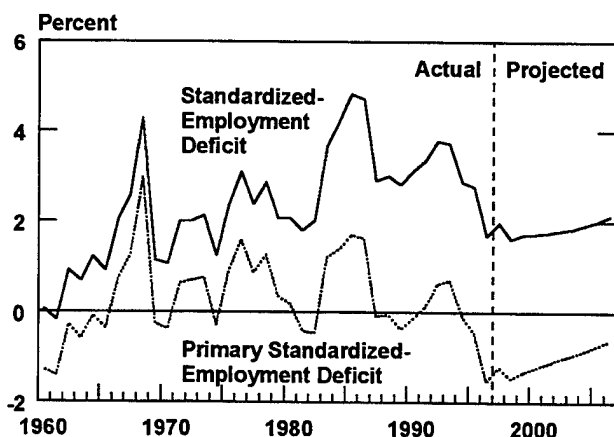
CBO's cyclical adjustments to revenues cannot capture such an upward swing in incomes relative to GDP. As a result, technical considerations (and not fiscal restraint) may well account for a significant portion of the decline in the standardized deficit over this period. Future revisions to the national income and product accounts should reduce that discrepancy between income and product. If so, estimates of the standardized deficit may eventually reflect more accurately the stance of fiscal policy in recent years. In the meantime, the potential for substantial revisions in the estimates certainly calls for caution in using the standardized deficit to assess the recent stance of fiscal policy.

On average through 1998, the outlook for fiscal policy is roughly neutral. As a percentage of potential GDP, the standardized-employment deficit rises slightly, from 1.7 percent in fiscal year 1996 to 1.8 percent in fiscal year 1997, but then drops to 1.5 percent in fiscal year 1998. Thereafter, the standardized-employment deficit creeps up slowly to about 2.3 percent by 2007.

Monetary Policy

Anticipating that robust growth in employment and incipient inflationary pressures would force the Federal Reserve to tighten monetary policy, bond markets bid up long-term interest rates throughout the first half of 1996. By June, the rate on 10-year Treasury notes had risen 120 basis points above its level at the end of 1995. But monetary policy held steady. After easing mildly in January 1996 with a cut in the target federal funds rate from 5.5 percent to 5.25 percent, the central

Figure 1-9.
Measures of the Standardized-Employment Deficit
as a Percentage of Potential GDP (By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: The standardized-employment deficit includes interest payments. The primary standardized-employment deficit excludes those payments.

Table 1-2. WITH CORRECTIONS

Measures of Fiscal Policy Under Baseline Assumptions (By fiscal year)

	Actual				Projected										
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In Billions of Dollars															
Standardized-Employment Deficit ^{a,b}	248	199	198	125	141	122	138	147	157	169	182	201	222	249	285
Primary standardized deficit ^{a,b}	50	-4	-34	-116	-108	-131	-124	-120	-115	-111	-107	-99	-89	-76	-55
Net interest payments	199	203	232	241	248	253	261	267	272	279	289	300	312	325	340
Reconciliation with Budget Deficit															
Cyclical deficit	35	8	-9	-4	2	11	16	18	19	20	20	19	18	16	10
Deposit insurance	-28	-8	-18	-8	-12	-4	-3	-1	0	0	-1	-1	-1	-1	-1
Timing of payments	0	4	1	-5	0	0	0	8	-8	0	0	0	14	1	-16
Spectrum auctions	0	0	-8	0	-7	-9	-4	-1	0	0	0	0	0	0	0
Total Budget Deficit ^b	255	203	164	107	124	120	147	171	167	188	202	219	254	266	278
Debt Held by the Public	3,247	3,432	3,603	3,733	3,869	4,009	4,173	4,358	4,539	4,740	4,954	5,184	5,448	5,723	6,011
As a Percentage of Potential GDP															
Standardized-Employment Deficit ^{a,b}	3.8	2.9	2.8	1.7	1.8	1.5	1.6	1.6	1.7	1.7	1.8	1.9	2.0	2.1	2.3
Primary standardized deficit ^{a,b}	0.8	-0.1	-0.5	-1.6	-1.4	-1.6	-1.4	-1.3	-1.2	-1.1	-1.0	-0.9	-0.8	-0.6	-0.4
Net interest payments	3.0	3.0	3.2	3.2	3.2	3.1	3.0	3.0	2.9	2.8	2.8	2.8	2.7	2.7	2.7
Reconciliation with Budget Deficit:															
Cyclical deficit	0.5	0.1	-0.1	0	0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Deposit insurance	-0.4	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Timing of payments	0.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1
Spectrum auctions	0.0	0.0	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Budget Deficit ^b	3.9	3.0	2.3	1.4	1.6	1.5	1.7	1.9	1.8	1.9	1.9	2.0	2.2	2.2	2.2
Debt Held by the Public	49.4	50.1	50.3	49.9	49.5	48.9	48.5	48.3	48.0	47.9	47.8	47.8	48.0	48.2	48.4
Memorandum:															
Potential GDP (Billions of dollars)	6,578	6,851	7,166	7,480	7,819	8,199	8,602	9,018	9,450	9,899	10,365	10,847	11,349	11,871	12,416

SOURCE: Congressional Budget Office.

a. These numbers exclude outlays for deposit insurance and offsetting receipts from spectrum auctions, and reflect adjustments for fiscal years in which there are 11 or 13 monthly payments for various entitlement programs instead of the usual 12.

b. Budget surpluses are shown as negative deficits.

Table F-1. WITH CORRECTIONS
Deficits, Debt, and Related Series, Fiscal Years 1956-1996

	In Billions of Dollars			As a Percentage of GDP			GDP (Billions of dollars)		NAIRU ^d (Percent)
	Deficit	Standardized- Employment Deficit ^a	Debt Held by the Public	Deficit	Standardized- Employment Deficit ^{a,b}	Debt Held by the Public	Actual ^c	Potential	
1956	4	e	222	0.9	f	52.0	427	414	5.5
1957	3	e	219	0.8	f	48.7	451	440	5.5
1958	-3	-1	226	-0.6	-0.2	49.3	459	466	5.5
1959	-13	-11	235	-2.6	-2.3	47.9	490	494	5.5
1960	e	e	237	0.1	f	45.6	519	519	5.5
1961	-3	2	238	-0.6	0.3	45.0	530	546	5.6
1962	-7	-6	248	-1.3	-1.0	43.7	568	574	5.6
1963	-5	-4	254	-0.8	-0.7	42.4	599	604	5.6
1964	-6	-8	257	-0.9	-1.3	40.1	641	635	5.6
1965	-1	-6	261	-0.2	-0.9	38.0	687	671	5.7
1966	-4	-15	264	-0.5	-2.1	34.9	756	717	5.8
1967	-9	-20	267	-1.1	-2.5	32.9	810	774	5.8
1968	-25	-35	290	-2.9	-4.2	33.3	870	840	5.8
1969	3	-9	278	0.3	-1.0	29.3	948	914	5.9
1970	-3	-8	283	-0.3	-0.8	28.1	1,010	1,001	5.9
1971	-23	-20	303	-2.1	-1.9	28.1	1,078	1,089	5.9
1972	-23	-23	322	-2.0	-2.0	27.4	1,175	1,179	6.0
1973	-15	-27	341	-1.1	-2.2	26.0	1,310	1,270	6.1
1974	-6	-17	344	-0.4	-1.2	23.9	1,438	1,409	6.2
1975	-53	-37	395	-3.4	-2.3	25.4	1,554	1,611	6.2
1976	-74	-58	477	-4.3	-3.2	27.6	1,733	1,781	6.2
1977	-54	-49	549	-2.7	-2.5	27.8	1,972	1,983	6.2
1978	-59	-64	607	-2.7	-2.9	27.4	2,214	2,200	6.3
1979	-41	-51	640	-1.6	-2.1	25.6	2,498	2,476	6.3
1980	-74	-57	710	-2.7	-2.1	26.1	2,719	2,782	6.3
1981	-79	-56	785	-2.6	-1.8	25.8	3,048	3,119	6.2
1982	-128	-74	920	-4.0	-2.2	28.6	3,214	3,419	6.2
1983	-208	-140	1,132	-6.1	-3.8	33.1	3,422	3,653	6.1
1984	-185	-168	1,300	-4.9	-4.3	34.0	3,820	3,891	6.1
1985	-212	-204	1,500	-5.2	-4.9	36.5	4,108	4,139	6.1
1986	-221	-211	1,737	-5.1	-4.8	39.8	4,368	4,389	6.0
1987	-150	-135	1,889	-3.2	-2.9	41.0	4,609	4,651	6.0
1988	-155	-147	2,051	-3.1	-3.0	41.4	4,957	4,949	6.0
1989	-152	-148	2,190	-2.8	-2.8	40.9	5,355	5,300	6.0
1990	-221	-175	2,411	-3.9	-3.1	42.4	5,683	5,659	6.0
1991	-269	-201	2,688	-4.6	-3.3	45.9	5,861	6,025	5.9
1992	-290	-239	2,999	-4.7	-3.8	48.8	6,149	6,311	5.9
1993	-255	-248	3,247	-3.9	-3.8	50.1	6,477	6,578	5.9
1994	-203	-199	3,432	-3.0	-2.9	50.2	6,837	6,851	5.8
1995	-164	-198	3,603	-2.3	-2.8	50.1	7,187	7,166	5.8
1996	-107	-125	3,733	-1.4	-1.7	49.9	7,484	7,480	5.8

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

- a. Excludes deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).
- b. The standardized-employment deficit is shown as a percentage of potential GDP.
- c. Values for 1956 through 1960 are estimated by CBO.
- d. The NAIRU is the nonaccelerating inflation rate of unemployment. It is the benchmark for computing potential GDP.
- e. Less than \$500 million.
- f. Less than 0.05 percent.

Table F-2. WITH CORRECTIONS
Standardized-Employment Deficit and Related Series,
Fiscal Years 1956-1996 (In billions of dollars)

	Budget Deficit	Cyclical Adjustment	Other Adjustments ^a	Standardized-Employment		
				Deficit	Revenues	Outlays
1956	4	-4	0	b	71	71
1957	3	-3	0	b	77	77
1958	-3	2	0	-1	81	82
1959	-13	1	0	-11	80	92
1960	b	b	0	b	92	92
1961	-3	5	0	2	99	97
1962	-7	2	b	-6	101	107
1963	-5	1	b	-4	108	112
1964	-6	-2	b	-8	111	119
1965	-1	-4	b	-6	113	119
1966	-4	-11	b	-15	121	137
1967	-9	-11	b	-20	140	160
1968	-25	-10	-1	-35	146	181
1969	3	-12	-1	-9	178	187
1970	-3	-5	-1	-8	190	198
1971	-23	3	b	-20	190	210
1972	-23	1	-1	-23	208	232
1973	-15	-12	-1	-27	221	248
1974	-6	-10	-1	-17	255	272
1975	-53	16	1	-37	291	328
1976	-74	17	-1	-58	310	368
1977	-54	6	-2	-49	359	408
1978	-59	-4	-1	-64	396	460
1979	-41	-8	-3	-51	457	509
1980	-74	17	b	-57	531	588
1981	-79	24	-1	-56	619	675
1982	-128	56	-2	-74	663	737
1983	-208	67	1	-140	654	794
1984	-185	20	-3	-168	685	852
1985	-212	11	-2	-204	742	945
1986	-221	9	2	-211	774	986
1987	-150	11	3	-135	865	1,001
1988	-155	-4	12	-147	908	1,055
1989	-152	-18	22	-148	977	1,125
1990	-221	-10	55	-175	1,025	1,200
1991	-269	45	23	-201	1,094	1,295
1992	-290	54	-2	-239	1,134	1,373
1993	-255	35	-28	-248	1,182	1,430
1994	-203	8	-3	-199	1,265	1,464
1995	-164	-9	-25	-198	1,346	1,544
1996	-107	-4	-14	-125	1,452	1,577

SOURCE: Congressional Budget Office.

a. Consists of deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

b. Less than \$500 million.

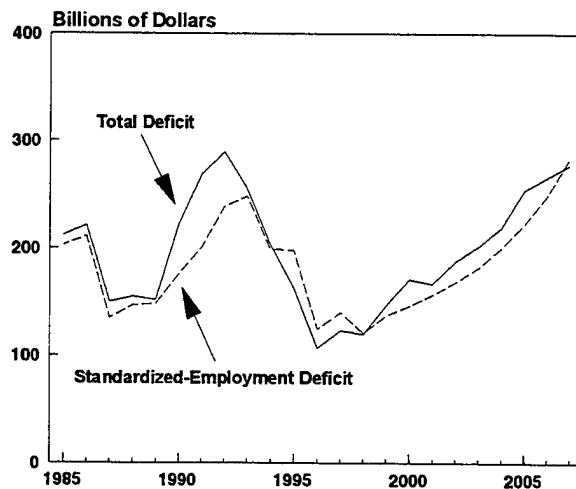
Table F-3. WITH CORRECTIONS
Standardized-Employment Deficit and Related Series,
Fiscal Years 1956-1996 (As a percentage of potential GDP)

	Budget Deficit ^a	Cyclical Adjustment	Other Adjustments ^b	Standardized-Employment		
				Deficit	Revenues	Outlays
1956	0.9	-1.0	0	c	17.2	17.2
1957	0.8	-0.8	0	c	17.6	17.6
1958	-0.6	0.4	0	-0.2	17.4	17.6
1959	-2.6	0.3	0	-2.3	16.2	18.5
1960	0.1	-0.1	0	c	17.8	17.8
1961	-0.6	0.9	0	0.3	18.1	17.8
1962	-1.3	0.3	-0.1	-1.0	17.6	18.7
1963	-0.8	0.2	-0.1	-0.7	17.9	18.5
1964	-0.9	-0.3	-0.1	-1.3	17.5	18.8
1965	-0.2	-0.7	-0.1	-0.9	16.8	17.8
1966	-0.5	-1.5	-0.1	-2.1	16.9	19.1
1967	-1.1	-1.4	-0.1	-2.5	18.1	20.6
1968	-2.9	-1.1	-0.1	-4.2	17.3	21.5
1969	0.3	-1.3	-0.1	-1.0	19.4	20.5
1970	-0.3	-0.5	-0.1	-0.8	19.0	19.8
1971	-2.1	0.3	c	-1.9	17.4	19.3
1972	-2.0	0.1	-0.1	-2.0	17.7	19.6
1973	-1.1	-0.9	-0.1	-2.2	17.4	19.6
1974	-0.4	-0.7	c	-1.2	18.1	19.3
1975	-3.4	1.0	c	-2.3	18.1	20.4
1976	-4.3	0.9	c	-3.2	17.4	20.7
1977	-2.7	0.3	-0.1	-2.5	18.1	20.6
1978	-2.7	-0.2	c	-2.9	18.0	20.9
1979	-1.6	-0.3	-0.1	-2.1	18.5	20.5
1980	-2.7	0.6	c	-2.1	19.1	21.1
1981	-2.6	0.8	c	-1.8	19.8	21.6
1982	-4.0	1.6	-0.1	-2.2	19.4	21.6
1983	-6.1	1.8	c	-3.8	17.9	21.7
1984	-4.9	0.5	-0.1	-4.3	17.6	21.9
1985	-5.2	0.3	-0.1	-4.9	17.9	22.8
1986	-5.1	0.2	c	-4.8	17.6	22.5
1987	-3.2	0.2	0.1	-2.9	18.6	21.5
1988	-3.1	-0.1	0.2	-3.0	18.3	21.3
1989	-2.8	-0.3	0.4	-2.8	18.4	21.2
1990	-3.9	-0.2	1.0	-3.1	18.1	21.2
1991	-4.6	0.8	0.4	-3.3	18.2	21.5
1992	-4.7	0.9	c	-3.8	18.0	21.7
1993	-3.9	0.5	-0.4	-3.8	18.0	21.7
1994	-3.0	0.1	c	-2.9	18.5	21.4
1995	-2.3	-0.1	-0.3	-2.8	18.8	21.6
1996	-1.4	c	-0.2	-1.7	19.4	21.1

SOURCE: Congressional Budget Office.

- a. The budget deficit is shown as a percentage of actual GDP.
- b. Consists of deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).
- c. Less than 0.05 percent.

Figure 2-1. WITH CORRECTIONS
The Federal Deficit (By fiscal year)



SOURCE: Congressional Budget Office.